3GPP TSG-RAN WG2 Meeting #113 bis electronic R2-2xxxxxx

Online, April 12 – April 20, 2021

Source: RAN2 Chairman (MediaTek)

Title: Meeting 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 Wednesday April 14 1000 UTC** to settle scope what is agreeable etc (phase 1)

A pre-final round with **Deadline for any functional and/or scope comments Monday April 19 1800 UTC.** At this point all 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 R2-113-bis 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

* [AT113bis-e][001][TEI16] TEI16 new and small (Chairman)

Scope: Treat R2-2103042, R2-2103043, R2-2103044, R2-2103045, R2-2102623, R2-2102624, R2-2103467, R2-2103464

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

* [AT113bis-e][002][NR15] Stage-2 (Nokia)

Scope: Treat [R2-2102901](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102901.zip), [R2-2102902](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102902.zip), [R2-2102903](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102903.zip), [R2-2102941](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102941.zip), [R2-2102942](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102942.zip), [R2-2103479](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103479.zip), [R2-2103485](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103485.zip), [R2-2103653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103653.zip), [R2-2103654](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103654.zip), [R2-2103983](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103983.zip), [R2-2103984](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103984.zip), R2-2102674, R2-2103337, R2-2103338, R2-2103339, R2-2104010, R2-2104011, R2-2104012, [R2-2103651](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103651.zip), [R2-2103652](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103652.zip).

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][003][NR15] MAC (Samsung)

Scope: Treat R2-2102683, R2-2102684, R2-2103848, R2-2104053, R2-2104091, R2-2104092, R2-2103448, R2-2104086,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][004][NR15] PDCP SDAP (LGE)

Scope: Treat R2-2103301, R2-2103302, R2-2103303, R2-2104201, R2-2104202, R2-2104293

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][005][NR15] Connection Control I (ZTE)

Scope: Treat R2-2103790, R2-2104300, R2-2104095, R2-2103793, R2-2103794, R2-2103859, R2-2104093, R2-2104094, R2-2104077, R2-2104078, R2-2104090, R2-2104079, R2-2104080,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][006][NR15] Connection Control II (Huawei)

Scope: Treat R2-2103535, R2-2103536, R2-2104254, R2-2104255, R2-2102715, R2-2103659, R2-2103660, R2-2104267, R2-2104268, R2-2103752, R2-2103753, R2-2103754, R2-2103860, R2-2103861

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][007][NR15] Inter-Node (Ericsson)

Scope: Treat R2-2102768, R2-2103027, R2-2102769, R2-2103028, R2-2103029, R2-2103028, R2-2103641, R2-2103642, R2-2103801, R2-2103802

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][008][NR15] Other & LTE (OPPO)

Scope: Treat R2-2103877, R2-2103878, R2-2104279, R2-2102905, R2-2102906, R2-2102907, R2-2102908, R2-2102903, R2-2102904, R2-2103643, R2-2103644, R2-2102770, R2-2104234, R2-2104238,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][009][NR15] UE caps BCS EN-DC (Huawei)

Scope: Taking into account on-line agreements, Treat R2-2104025, R2-2103061, R2-2104030, R2-2104212, R2-2104213, R2-2104214, R2-2104026, R2-2104027, R2-2104028,

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

Intended outcome: Report and Agreed-in-principle CRs (if possible), Approved LS.

Deadline: Schedule A

* [AT113bis-e][010][NR15] UE caps DL scheduling slot offset (Ericsson)

Scope: Treat R2-2103768, R2-2103770, R2-2103771, R2-2103769, R2-2103799

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][011][NR15] UE caps III (ZTE)

Scope: Treat R2-2104185, R2-2104186, R2-2104187, R2-2104188, R2-2102618, R2-2103025, R2-2103026, R2-2102610, R2-2103759, R2-2103760,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][012][NR15] UE caps IV (Mediatek)

Scope: Treat R2-2102644, R2-2104084, R2-2104087, R2-2104029, R2-2103633, R2-2102623, R2-2104098, R2-2104101, R2-2103115, R2-2103116, R2-2103634, R2-2103635, R2-2103791, R2-2103792, R2-2104021, R2-2104022

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][013][NR15] UE caps V (Qualcomm)

Scope: Treat R2-2103761, R2-2103762, R2-2103763, R2-2104096, R2-2104232, R2-2104233, R2-2104257, R2-2104258, R2-2104259, R2-2104260, R2-2104281, R2-2104283

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

* [AT113bis-e][014][NR16] Stage-2 (Xiaomi)

Scope: Treat R2-2102609, R2-2103640, R2-2104218, R2-2104219, R2-2103848, R2-2103880, R2-2104172, R2-2104208, R2-2104209, R2-2104252, R2-2103557, R2-2104015

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

Intended outcome: Report and Agreed-in-principle CRs, Approved LS out if applicable

Deadline: Schedule A

* [AT113bis-e][015][NR16] Overlapping UCI Data and SR of equal priority and UL skipping (vivo)

Scope: Take into account on-line progress, Take into account R2-2102628, R2-2102626, R2-2102724, R2-2102759, R2-2102754, R2-2103381, R2-2103481, R2-2103846, R2-2103847, R2-2102775, R2-2103067, R2-2103426, R2-2103208, R2-2103439, R2-2103440, R2-2102776, R2-2103845, R2-2104054

Determine agreeable parts, make decisions for Reply LS to RAN1. For parts with incomplete conclusions, pave the way for on-line CB

Intended outcome: Report, approved LS out,

Deadline: Monday April 19 (if needed CB April 20)

* [AT113bis-e][016][NR16] MAC II (Samsung)

Scope: Treat R2-2102774, R2-2102723, R2-2102845, R2-2103427, R2-2103435, R2-2102791, R2-2102778, R2-2103436, R2-2102763,

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

* [AT113bis-e][017][NR16] MAC III (Ericsson)

Scope: Treat R2-2102777, R2-2103023, R2-2104104, R2-2103534, R2-2102764, R2-2103293, R2-2103447, R2-2103437, R2-2103438

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

* [AT113bis-e][018][NR16] RLC PDCP BAP (Nokia)

Scope: Treat R2-2102943, R2-2102630, R2-2102846, R2-2103590, R2-2104203, R2-2104165

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

* [AT113bis-e][019][NR16] Connection Control (Fujitsu)

Scope: Treat R2-2103209, R2-2103210, R2-2104247, R2-2104240, R2-2103280, R2-2103449, R2-2102854, R2-2104167, R2-2103937

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

* [AT113bis-e][020][NR16] RRM and Measurments (Apple)

Scope: Treat R2-2102650, R2-2103030, R2-2103169, R2-2103879, R2-2103281, R2-2104173,

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

* [AT113bis-e][021][NR16] Sys Info Inter Node and Misc (Ericsson)

Scope: Treat R2-2102714, R2-2103582, R2-2103661, R2-2103929, R2-2104205, R2-2103851, R2-2103645, R2-2103936,

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

* [AT113bis-e][022]NR16] IAB LTE Changes (Samsung)

Scope: Treat R2-2102800, R2-2103558, R2-2103598, R2-2103601, R2-2104166, R2-2104177, R2-2104178

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

* [AT113bis-e][023]NR16] UE caps (Intel)

Scope: Treat R2-2102868, R2-2103734, R2-2103764, R2-2102879, R2-2103137, R2-2103669,

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

* [AT113bis-e][024]NR16] Idle Inactive (Huawei)

Scope: Treat R2-2102930, R2-2103168, R2-2102910

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

* [AT113bis-e][025][NR17] R4 related I (ZTE)

Scope: Treat Handover with PSCell and 35MHz 45MHz Bandwidth R2-2102652, R2-2103032, R2-2103340, R2-2103862, R2-2103863, R2-2104133, R2-2104155, R2-2103033, R2-2103034, R2-2104156, R2-2104249, R2-2104250, R2-2104251

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

Intended outcome: Report and Agreed-in-principle CRs, Approved LS out, if applicable

Deadline: Schedule A

* [AT113bis-e][026][NR17] SA related (Huawei)

Scope: Treat False Base Station Detection and Network Sharing Multiple SSB R2-2102669, R2-2103864, R2-2104134, R2-2104135, R2-2102676, R2-2103221, R2-2104161, R2-2104062, R2-2104102.

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

Intended outcome: Report and Agreed-in-principle CRs, Approved LS out, if applicable

Deadline: Schedule A

* [AT113bis-e][027][IoT NTN] Essential Parts (Huawei)

Scope: Take into account the contributions on Essential parts in AI 9.2.1. Collect comments. Identify/confirm enhancements that are considered essential for IoT NTN. Can also collect opinions, on which aspects of those enhancements need further study in the SI. Note it is not expected to achieve full consensus on all points, e.g. for some points it might only be possible to capture observations such as: “there is significant/some/low/no interest to enhance X, to address problem Y”. Exclusion proposals are not the primary focus but can be captured if there is a clear benefit to exclude. Note that this listing is not intended to be an exhaustive scope (the old agreement still generally applies that R2 assumes all functions upto R16 can be supported, unless problems are found).

Intended outcome: Report

Final Deadline for comments: Friday April 16 (so the report can be in time for on-line session Monday). Intermediate deadlines by Rapporteur if needed.

* [AT113bis-e][028][IoT NTN] Mobility and Tracking Area (Mediatek)

Scope: Take into account the contributions in AI 9.2.3. Collect comments. Determine which additional enhancements to be considered for IoT NTN (if any). Note that the RP recommendations to keep scope small and guidance in RP-210915 shall be taken into account when assessing the proposals, i.e. focus on essential enhancements. Non-essential enhancements should be considered only if impact is small.

      Intended outcome: Report

      Final Deadline for comments: Friday April 16 (so the report can be in time for on-line session Monday). Intermediate deadlines by Rapporteur if needed.

* [AT113bis-e][030][NR16] Signalling scheme of Transparent TxD (vivo)

Scope: Converge on CRs (collect comments, progress as far as possible / reasonable), Confirm wheher rel-independent is possible or not, Make a Reply LS to R4.

Intended outcome: Report, Approved LS, CRs (preferably agreed in-pricniple)

Deadline: Report: Friday April 16, LS out and CRs: Monday April 19.

* [AT113bis-e][031][MBS17] MBS session activation (Nokia)

Scope: Based on the agreement, on-line comments and submitted papers, Progress the topic of session activation and group paging/notification to reach agreements if possible, FFS points otherwise. Can also collect comments on notification for non-supporting nodes.

Intended outcome: Report, Agreements

Deadline: Report/Agreements Friday April 16

* [AT113bis-e][032][MBS17] MCCH scheduling and Change notification (Huawei)

Scope: Progress remaninig proposals from R2-2103909 to reach agreements and FFS points. Make an LS to RAN1 based on agreements and provided comments (e.g. consider whether some info on MTCH need to be provided).

Intended outcome: Report, Agreements, Approved LS out.

Deadline: Report/Agreements Friday April 16, LS out Monday April 19 1800 UTC

* [AT113bis-e][033][eNPN] Reply LS on support of PWS over SNPN (Qualcomm)

Scope: Reply LS on support of PWS over SNPN.

Intended outcome: Approved LS out.

Deadline: Monday April 19.

* [AT113bis-e][034][1024QAM] (Ericsson)

Scope: Take into account relevant tdocs. Progress RAN2 configuration CR (not UE cap). Can consider whether to send LS.

Intended outcome: Agreed in principle CR. If applicable, approved LS out.

Deadline: Deadline for Comments Mon April 19. Allow for checking until EOM.

* [AT113bis-e][035][feMIMO] (Samsung)

Scope: Progress R2 discussion on the relevant questions in the LS (on a high level). Conclude on whether serving cell change is part of this scope or not (if possible). Identify major discussion points for R2. Determine questions that should be asked to R1, if any.

Intended outcome: Report, TBD LS out (questions to R1, no reply)

Deadline: In time for CB Tuesday April 20.

* [AT113bis-e][036][MBS17] PTM PTP operation switching (Ericsson)

Scope: Based on R2-2103518 and related on-line discussion, offline on P6/P7, focus on the main aspects, determine the options on the table (with significant support) with brief justifications (the issue(s) that an option is expected to address) and converge if possible. If R1 aspects e.g. DCI impacts need to be captured we can capture FFS for now, no LS now.

Intended outcome: Report.

Deadline: In time for CB Tuesday April 20

* [AT113bis-e][037][eQoE] Pause Resume (Huawei)

Scope: Address the following questions: Whether measurement collection internally in the UE shall continue when Paused or not (i.e. whether only transmission of reports over Uu is actually paused). Assuming Yes, address the additional question whether handling of and specification of UE-collected-but-non-Uu-reported measurements should be in AS/RAN2 or Application/SA4/SA5

Intended outcome: Report

Deadline: Tuesday April 20 to come-back on-line.

# 1 Opening of the meeting

**This e-Meeting**

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

- RAN2 113bis 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.

* Chair: There were no comments to announcements of AI 1, 1.1, 1.2, 1.3

# 2 General

## 2.1 Approval of the agenda

[R2-2102600](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102600.zip) Agenda for RAN2#113bis-e Chairman agenda Late

* [000] Approved

## 2.2 Approval of the report of the previous meeting

R2-2102601 RAN2#113-e Meeting Report MCC report Late

* [000] Approved

## 2.3 Reporting from other meetings

## 2.4 Others

# 3 Incoming liaisons

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

[R2-2102603](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102603.zip) LS on broadcasting from other PLMN in case of Disaster Condition (C1-211189; contact: LGE) CT1 LS in Rel-17 FS\_MINT-CT To:SA3 Cc:RAN2

* [000] Noted

[R2-2102606](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102606.zip) LS on Information on the port number allocation solutions (C4-211806; contact: Huawei) CT4 LS in Rel-17 FS\_PortAl To:RAN2, RAN3, SA4, CT3, SA5 Cc:SA, CT, RAN, SA2

* [000] Noted

# 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.

[R2-2102916](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102916.zip) Corrections on the field description of commonIEsProvideAssistanceData in TS36.355 CATT, Huawei, HiSilicon CR Rel-14 36.355 14.7.0 0250 - F LTE\_feMTC-Core

[R2-2102917](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102917.zip) Corrections on the acquisition of a posSI message CATT CR Rel-15 36.331 15.13.0 4611 - F LCS\_LTE\_acc\_enh-Core

[R2-2102918](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102918.zip) Corrections on the acquisition of a posSI message CATT CR Rel-16 36.331 16.4.0 4612 - A LCS\_LTE\_acc\_enh-Core

[R2-2103216](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103216.zip) Correction on SUPL support of positioning methods Samsung CR Rel-14 36.305 14.3.0 0100 - F UTRA\_LTE\_iPos\_enh2-Core

[R2-2103217](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103217.zip) Correction on SUPL support of positioning methods Samsung CR Rel-15 36.305 15.5.0 0101 - A UTRA\_LTE\_iPos\_enh2-Core

[R2-2103218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103218.zip) Correction on SUPL support of positioning methods Samsung CR Rel-16 36.305 16.2.0 0102 - A UTRA\_LTE\_iPos\_enh2-Core

R2-2103603 Correction to need code for DL LPP message-R16 Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0297 - F NR\_pos-Core, NR\_newRAT-Core, LCS\_LTE\_acc\_enh-Core, NB\_IOTenh-Core, LTE\_feMTC-Core, LCS\_BDS-LTE-Core, LCS\_LTE Withdrawn

[R2-2103604](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103604.zip) Correction to need code for DL LPP message-R15 Huawei, HiSilicon CR Rel-15 37.355 15.1.0 0298 - F NR\_newRAT-Core, LCS\_LTE\_acc\_enh-Core, NB\_IOTenh-Core, LTE\_feMTC-Core, LCS\_BDS-LTE-Core, LCS\_LTE

[R2-2103605](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103605.zip) Correction to need code for DL LPP message-R14 Huawei, HiSilicon CR Rel-14 36.355 14.7.0 0251 - F NB\_IOTenh-Core, LTE\_feMTC-Core, LCS\_BDS-LTE-Core, LCS\_LTE

[R2-2103606](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103606.zip) Correction to need code for DL LPP message-R13 Huawei, HiSilicon CR Rel-13 36.355 13.3.0 0252 - A LCS\_BDS-LTE-Core, LCS\_LTE

[R2-2103607](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103607.zip) Correction to need code for DL LPP message-R12 Huawei, HiSilicon CR Rel-12 36.355 12.5.0 0253 - F LCS\_BDS-LTE-Core, LCS\_LTE

[R2-2103608](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103608.zip) Correction to need code for DL LPP message-R11 Huawei, HiSilicon CR Rel-11 36.355 11.6.0 0254 - A LCS\_LTE

[R2-2103609](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103609.zip) Correction to need code for DL LPP message-R10 Huawei, HiSilicon CR Rel-10 36.355 10.12.0 0255 - A LCS\_LTE

[R2-2103610](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103610.zip) Correction to need code for DL LPP message-R9 Huawei, HiSilicon CR Rel-9 36.355 9.14.0 0256 - F LCS\_LTE

[R2-2103616](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103616.zip) Correction to need code for DL LPP message-R16 Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0292 1 F NR\_pos-Core, NR\_newRAT-Core, LCS\_LTE\_acc\_enh-Core, NB\_IOTenh-Core, LTE\_feMTC-Core, LCS\_BDS-LTE-Core, LCS\_LTE R2-2101827

## 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.

[R2-2103813](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103813.zip) On the lack of PLMN identity check in case of anyCellSelected state related logging Ericsson CR Rel-15 36.331 15.13.0 4624 - F TEI15

[R2-2103814](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103814.zip) On the lack of PLMN identity check in case of anyCellSelected state related logging Ericsson CR Rel-16 36.331 16.4.0 4625 - A TEI15

[R2-2103816](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103816.zip) On the lack of PLMN identity check in case of anyCellSelected state related logging Ericsson discussion

[R2-2104013](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104013.zip) Discussion on one-shot configuration Huawei, HiSilicon discussion Rel-15 TEI15

[R2-2104014](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104014.zip) Correction on category dependency for DL Category 13 Huawei, HiSilicon CR Rel-12 36.306 12.13.0 1806 - F TEI12

[R2-2104248](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104248.zip) Correction on T325 Google Inc. CR Rel-15 36.331 15.13.0 4640 - F LTE-L23, TEI11

[R2-2104253](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104253.zip) Correction on T325 Google Inc. CR Rel-16 36.331 16.4.0 4641 - F LTE-L23, TEI11

# 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.

[R2-2102649](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102649.zip) Second Reply LS to RP-202935 = R4-2100025 on BCS reporting and support for intra-band EN-DC band combinations (R4-2103401; contact: T-Mobile USA) RAN4 LS in Rel-15 NR\_newRAT-Core To:RAN, RAN2 Cc:-

Chair: Has already been taken into account. To be noted [000]

* [000] Noted

[R2-2102654](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102654.zip) LS on BCS reporting and support for intra-band EN-DC band combinations (RP-202935; contact: Nokia) RAN LS in Rel-15 NR\_newRAT-Core To:RAN2, RAN4 Cc:-

Chair: Has already been taken into account. To be noted [000]

* [000] Noted

## 5.2 Stage 2 corrections

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

* [AT113bis-e][002][NR15] Stage-2 (Nokia)

Scope: Treat [R2-2102901](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102901.zip), [R2-2102902](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102902.zip), [R2-2102903](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102903.zip), [R2-2102941](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102941.zip), [R2-2102942](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102942.zip), [R2-2103479](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103479.zip), [R2-2103485](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103485.zip), [R2-2103653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103653.zip), [R2-2103654](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103654.zip), [R2-2103983](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103983.zip), [R2-2103984](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103984.zip), R2-2102674, R2-2103337, R2-2103338, R2-2103339, R2-2104010, R2-2104011, R2-2104012, [R2-2103651](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103651.zip), [R2-2103652](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103652.zip).

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104510](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104510.zip) Offline 002 on Stage 2 Corrections Nokia

* [002] Noted, agreements reflected below

### 5.2.1 TS 3x.300

[R2-2102901](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102901.zip) Clarification on UL data transmission along with RRCReconfigurationComplete during HO OPPO, Nokia (Rapporteur), CMCC, Xiaomi, Huawei, HiSilicon CR Rel-15 38.300 15.12.0 0348 - F LTE\_NR\_DC\_CA\_enh-Core

* [002] Not pursued

[R2-2102902](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102902.zip) Clarification on UL data transmission along with RRCReconfigurationComplete during HO OPPO, Nokia (Rapporteur), CMCC, Xiaomi, Huawei, HiSilicon CR Rel-16 38.300 16.5.0 0349 - A LTE\_NR\_DC\_CA\_enh-Core

* [002] Not pursued

[R2-2102941](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102941.zip) Intra and Inter Frequency Scenarios Nokia (Rapporteur) CR Rel-15 38.300 15.12.0 0350 - F NR\_newRAT-Core

* [002] Not pursued

[R2-2102942](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102942.zip) Intra and Inter Frequency Scenarios Nokia (Rapporteur) CR Rel-16 38.300 16.5.0 0351 - A NR\_newRAT-Core

* [002] Not pursued

[R2-2103479](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103479.zip) Correction on random access procedure for resume procedure Nokia (Rapporteur) CR Rel-15 38.300 15.12.0 0355 - F NR\_newRAT-Core

* [002] Not pursued

[R2-2103485](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103485.zip) Correction on random access procedure for resume procedure Nokia (Rapporteur) CR Rel-16 38.300 16.5.0 0356 - A NR\_newRAT-Core

* [002] Not pursued

[R2-2103653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103653.zip) Clarification to data forwarding at full configuration Ericsson CR Rel-15 38.300 15.12.0 0360 - F NR\_newRAT-Core

* [002] Merged with CR in R2-2103983

[R2-2103654](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103654.zip) Clarification to data forwarding at full configuration Ericsson CR Rel-16 38.300 16.5.0 0361 - A NR\_newRAT-Core

* [002] Merged with CR in R2-2103984

[R2-2103983](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103983.zip) SRB PDCP handling upon handover Huawei, HiSilicon, Nokia (rapporteur) CR Rel-15 38.300 15.12.0 0363 - F NR\_newRAT-Core

- [002] Rapporteur ph1, fix the cover sheet

* [002] revised

[R2-2104515](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104515.zip) SRB PDCP handling upon handover Huawei, HiSilicon, Nokia (rapporteur), Ericsson CR Rel-15 38.300 15.12.0 0363 1 F NR\_newRAT-Core

* [002] Agreed in princple

[R2-2103984](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103984.zip) SRB PDCP handling upon handover Huawei, HiSilicon, Nokia (rapporteur) CR Rel-16 38.300 16.5.0 0364 - A NR\_newRAT-Core

* [002] revised

R2-2104516 SRB PDCP handling upon handover Huawei, HiSilicon, Nokia (rapporteur), Ericsson CR Rel-16 38.300 16.5.0 0364 1 A NR\_newRAT-Core

* [002] Agreed in princple

Handover Terminology

These tdocs Moved from 8.17

[R2-2102674](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102674.zip) LS on Handover terminology (S5-211324; contact: Ericsson) SA5 LS in Rel-17 E\_HOO To:RAN2, RAN3 Cc:-

* [002] Noted

[R2-2104010](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104010.zip) Discussion on handover terminology based on SA5 LS S5-211324 Huawei, HiSilicon discussion Rel-17 TEI17

* [002] Noted

[R2-2103337](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103337.zip) 38.300 CR: removing ambiguous HO naming Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.5.0 0354 - F E\_HOO

- [002] Huawei thinks it is unclear whether the change “handover without DAPS” means including CHO or not. Suggest postpone.

- [002] Chair: We can anyway agree in principle and there is possibility to come back next meeting if there is unclarity after checking.

* [002] Agreed in Principle

[R2-2103338](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103338.zip) 36.300 CR: removing ambiguous HO naming Nokia, Nokia Shanghai Bell CR Rel-17 36.300 16.5.0 1336 - F E\_HOO

* [002] Agreed in Principle

[R2-2103339](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103339.zip) Response LS to SA5 on handover terminology Nokia, Nokia Shanghai Bell LS out Rel-17 E\_HOO To:SA5 Cc:RAN3

* [002] for email approval
* [Post113bis-e][050][NR16] Reply LS on Handover terminology (Nokia)

Intended outcome: Approved Reply LS to SA5 on Handover terminology

Deadline: Short

[R2-2104011](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104011.zip) Correction on handover terminology Huawei, HiSilicon CR Rel-17 36.300 16.5.0 1337 - F TEI17

* [002] Not Pursued

[R2-2104012](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104012.zip) Correction on handover terminology Huawei, HiSilicon CR Rel-17 38.300 16.5.0 0365 - F TEI17

* [002] Not Pursued

### 5.2.2 TS 37.340

[R2-2103651](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103651.zip) Clarification to data forwarding upon SN change with full configuration Ericsson CR Rel-15 37.340 15.12.0 0259 - F NR\_newRAT-Core

- [002] ph1 Rapporteur: R2-2103651 and R2-2103652 are agree in principle, with the understanding that merging with another 37.340 CR should take place at the next meeting if any is agreed.

* [002] Agreed in principle (consider merge next meeting)

[R2-2103652](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103652.zip) Clarification to data forwarding upon SN change with full configuration Ericsson CR Rel-16 37.340 16.5.0 0260 - A NR\_newRAT-Core

* [002] Agreed in principle (consider merge next meeting)

## 5.3 User Plane corrections

### 5.3.1 MAC

* [AT113bis-e][003][NR15] MAC (Samsung)

Scope: Treat R2-2102683, R2-2102684, R2-2103848, R2-2104053, R2-2104091, R2-2104092, R2-2103448, R2-2104086,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104533](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104533.zip) Report of [AT113bis-e][003][NR15] MAC (Samsung) Samsung discussion Rel-15 NR\_newRAT-Core

* [003] Noted

[R2-2102683](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102683.zip) Correction to DRX active time criteria with CSI masking Qualcomm Incorporated CR Rel-15 38.321 15.12.0 1063 - F NR\_newRAT-Core

* [003] Not pursued

[R2-2102684](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102684.zip) Correction to DRX active time criteria with CSI masking Qualcomm Incorporated CR Rel-16 38.321 16.4.0 1064 - F NR\_newRAT-Core

* [003] Not pursued

[R2-2103848](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103848.zip) Error handling of invalid MAC PDU formats Apple discussion Rel-15 NR\_newRAT-Core

* [003] Not pursued

[R2-2104053](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104053.zip) Clarification on reporting multiplexed CSI on PUCCH in DRX Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [003] Not pursued

[R2-2104091](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104091.zip) Clarification on DL HARQ process number Huawei, HiSilicon CR Rel-15 38.321 15.12.0 1092 - F NR\_newRAT-Core

* [003] Not pursued

[R2-2104092](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104092.zip) Clarification on DL HARQ process number Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1093 - A NR\_newRAT-Core

* [003] Not pursued

[R2-2103448](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103448.zip) Correction on Truncated BSR ASUSTeK CR Rel-16 38.321 16.4.0 1088 - F NR\_newRAT-Core

Moved from 6.1.3

* [003] Not pursued

[R2-2104086](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104086.zip) Clarification on SUL switch LG Electronics UK CR Rel-16 38.321 16.4.0 1091 - F TEI16

Moved from 6.1.3

* [003] Not pursued

### 5.3.2 RLC PDCP SDAP

* [AT113bis-e][004][NR15] PDCP SDAP (LGE)

Scope: Treat R2-2103301, R2-2103302, R2-2103303, R2-2104201, R2-2104202, R2-2104293

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104534](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104534.zip) Report of [AT113bis-e][004][NR15] PDCP SDAP LGE

- [004] Rapporteur additional comment: Though I already uploaded the report in R2-2104534, it seems that P1 is not acceptable to some companies. Thus, I think it would be better to postpone R2-2103302 and R2-2103303 to the next meeting.

* [004] Noted, Agreements taken into account and reflected below

PDCP related

[R2-2103301](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103301.zip) Discussion on the issue of PDCP re-establishment after RRC re-establishment NEC discussion Rel-15 NR\_newRAT-Core

* [004] noted

[R2-2103302](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103302.zip) Correction on PDCP re-establishment after RRC re-establishment NEC CR Rel-15 38.323 15.7.0 0066 - F NR\_newRAT-Core

* [004] Postponed

[R2-2103303](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103303.zip) Correction on PDCP re-establishment after RRC re-establishment NEC CR Rel-16 38.323 16.3.0 0067 - A NR\_newRAT-Core

* [004] Postponed

[R2-2104201](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104201.zip) Integrity check for interspersed ROHC feedback LG Electronics Inc. (PDCP rapporteur) CR Rel-15 38.323 15.7.0 0068 - F NR\_newRAT-Core Late

* [004] not Pursued

[R2-2104202](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104202.zip) Integrity check for interspersed ROHC feedback LG Electronics Inc. (PDCP rapporteur) CR Rel-16 38.323 16.3.0 0069 - A NR\_newRAT-Core Late

* [004] not Pursued

SDAP related

[R2-2104293](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104293.zip) Clarification on the change of PDU session ID Samsung CR Rel-15 38.313 15.13.0 2568 - F NR\_newRAT-Core Late

* [004] Postponed

## 5.4 Control Plane corrections

### 5.4.1 NR RRC

#### 5.4.1.1 Connection control

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

RLC bearer handling with Full Configuration (continuation)

[R2-2104127](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104127.zip) Clarification on RLC bearer handling in Full Configuration MediaTek Inc., Qualcomm Incorporated discussion Rel-15 NR\_newRAT-Core

DISCUSSION

- LG think from another section 3.1 the understading is the opposite.

- MTK and QC UEs behave acc to the Proposal 1.

- Chair proposes to go offline to see if we can find solution that allows current UE implementation. Ericsson think a longer discussion is needed.

- ZTE think the issue is important and we can have a longer discussion, network can use the full config, but Sequence number assumption need to be sorted out.

- Intel agrees to sort out the issues by mail

* Email discussion to next meeting

[R2-2104140](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104140.zip) Clarification on RLC bearer handling in full configuration MediaTek Inc., Qualcomm Incorporated CR Rel-15 38.331 15.13.0 2555 - F NR\_newRAT-Core

[R2-2104143](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104143.zip) Clarification on RLC bearer handling in full Configuration MediaTek Inc., Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2556 - A NR\_newRAT-Core

[R2-2103657](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103657.zip) Clarification on the RLC entity release during full configuration Ericsson CR Rel-15 38.331 15.13.0 2522 - F NR\_newRAT-Core

[R2-2103658](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103658.zip) Clarification on the RLC entity release during full configuration Ericsson CR Rel-16 38.331 16.4.1 2523 - A NR\_newRAT-Core

[R2-2103655](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103655.zip) Clarification on SRB1 configuration for RRC resume and reestablishment Ericsson, Intel Corporation, ZTE Corporation CR Rel-15 38.331 15.13.0 2520 - F NR\_newRAT-Core

[R2-2103656](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103656.zip) Clarification on SRB1 configuration for RRC resume and reestablishment Ericsson, Intel Corporation, ZTE Corporation CR Rel-16 38.331 16.4.1 2521 - A NR\_newRAT-Core

* All 6 CRs above are postponed
* [Post113bis-e][060][NR15] RLC bearer handling with Full Configuration (Ericsson, Mediatek)

Scope: Based on R2-2104127 and related parts, determine consolidated view what is the problem and the solution / potential solution(s).

Intended outcome: Report

Deadline: Long

* [AT113bis-e][005][NR15] Connection Control I (ZTE)

Scope: Treat R2-2103790, R2-2104300, R2-2104095, R2-2103793, R2-2103794, R2-2103859, R2-2104093, R2-2104094, R2-2104077, R2-2104078, R2-2104090, R2-2104079, R2-2104080,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104633](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104633.zip) Summary [AT113bis-e][005][NR15] Connection Control I ZTE

On-Line DISCUSSION only on P1, other conclusions taken into account and reflected below marked [005]

- ZTE think that BWP0 can only be modified ..

- Huawei think that from signalling point of view the network can only modify, but if the network releases all dedicated fields th UE should consider BWP0 as non configured.

- MTK think indeed the network can configure another BWP but BWP 0 still remains, and think the rapporteur proposal is correct. Oppo agres with MTK cannot be released.

- Apple are concerned about can/may in bullet 2. The network need to provide the info what BWP the UE need to use. MTK agrees, the network need to provide the first activeBWP. LG agrees and think this need to be clarified in the TS. Oppo think the network have flexibility, there are some cases with no ambigiouty, e.g. if there is only one remaining BWP after a reconfiguration.

- Ericsson ok with the first proposal, would like to have the current flexibility for the second bullet. Think neither of these requires TS change.

- B2 Apple think that the UE beahivour is not clear of the IE is not included.

- LG think that in MAC only BWP switch is specified, so the UE must assume a BWP.

- Nokia think that we don’t need to calture anything for the first.

- For the second one, agree with Apple, but a sensible network will do the right thing. Nokia think the case of one BWP released / added at the same time with same ID.

- Huawei think the second bullet is unclear. Apple think there is no relation beween DCI based and RRC based switch.

- Nokia wonder if the 3rd bullet involves also activation. Apple agrees, and think a UE doesn't see this as modification? LG think it can be immediately activated asa SCell state can be indicated.

- Oppo want to add a NOTE

* From signalling point of view, the network can add/modify/release any BWP with BWP ID > 0 (including the active BWP) in a single RRC message (note: for BWP#0 network can only modify the dedicated part of the configuration).
* For SpCell, if the network releases the active BWP using RRC reconfiguration message, it includes the firstActiveDownlinkBWP-Id/ firstActiveUplinkBWP-Id in the RRC Reconfiguration message.

Chair Comment: There was No on-line agreement at current meeting to make any TS change, but also no time. CRs below marked postponed.

BWP

[R2-2103790](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103790.zip) Discussion on the release of active BWP ZTE Corporation, Sanechips discussion

=> Revised in [R2-2104300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104300.zip)

[R2-2104300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104300.zip) Discussion on the release of active BWP ZTE Corporation, Sanechips discussion

* [005] Noted

[R2-2104095](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104095.zip) Discussion on active BWP release Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [005] Noted

[R2-2103793](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103793.zip) Correction on firstActiveDownlinkBWP-Id ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2530 - F NR\_newRAT-Core

[R2-2103794](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103794.zip) Correction on firstActiveDownlinkBWP-Id ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2531 - A NR\_newRAT-Core

* [005] Both Postponed

DC related

[R2-2103859](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103859.zip) NR-DC Clarification Apple discussion Rel-15 NR\_newRAT-Core, TEI15

* [005] noted
* [005] reconfigurationWithSync is not mandatory in SCG config for handover without SCG change (no spec changes needed).
* [005] Postponed discussion: whether in the case of HO without SCG change, if SCG reconfigurationWithSync is not included, the UE continues the transmission on SG during the handover or not or whether this can be left to UE implementation, and whether there is a need for TS clarification.
* [005] Postponed: CRs for UE timing at NR-DC handover. Majority view seems to be that UE should apply the target PCell timing as the PSCell SMTC timing reference during the NR-DC handover

[R2-2104093](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104093.zip) Radio bearer handling upon SCG RLF Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2547 - F NR\_newRAT-Core

* [005] Not pursued

[R2-2104094](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104094.zip) Radio bearer handling upon SCG RLF Huawei, HiSilicon CR Rel-16 38.331 16.4.0 2548 - A NR\_newRAT-Core

* [005] Not pursued

[R2-2104077](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104077.zip) Clarification on SCG failure information ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

* [005] Noted
* [005] Upon initiating SCG failure information procedure, if T310/T312 for the PSCell expires before the SCG link is recovered, UE does not trigger another SCG failure information procedure

[R2-2104078](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104078.zip) CR on SCG failure information ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2545 - F NR\_newRAT-Core

* [005] Not pursued

[R2-2104090](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104090.zip) CR on SCG failure information ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2546 - A NR\_newRAT-Core, NR\_Mob\_enh-Core, NR\_unlic-Core

* [005] Not pursued

[R2-2104079](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104079.zip) CR on SCG failure information ZTE Corporation, Sanechips CR Rel-15 36.331 15.13.0 4629 - F NR\_newRAT-Core

Moved from 5.4.2

* [005] Not pursued

[R2-2104080](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104080.zip) CR on SCG failure information ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4630 - A NR\_newRAT-Core

Moved from 5.4.2

* [005] Not pursued
* [AT113bis-e][006][NR15] Connection Control II (Huawei)

Scope: Treat R2-2103535, R2-2103536, R2-2104254, R2-2104255, R2-2102715, R2-2103659, R2-2103660, R2-2104267, R2-2104268, R2-2103752, R2-2103753, R2-2103754, R2-2103860, R2-2103861

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

L2 Parameters

[R2-2103535](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103535.zip) Correction on contention resolution timer (R15) Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2512 - F NR\_newRAT-Core

* [006] Not Pursued

[R2-2103536](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103536.zip) Correction on contention resolution timer (R16) Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2513 - A NR\_newRAT-Core

* [006] Not Pursued

Timer

[R2-2104254](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104254.zip) Correction on T325 Google Inc. CR Rel-15 38.331 15.13.0 2563 - F NR\_newRAT-Core

- [006] Rap: The change in R2-2104254/R2-2104255 is agreed in-principle, and the coversheet shall be revised according to comments, e.g. to simply clarify that T325 shall not be stopped in case of inter-RAT mobility from NR. The CRs are provided to the next meeting.

* [006] Agreed in principle, but cover sheet update acc to comments expected for next meeting

[R2-2104255](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104255.zip) Correction on T325 Google Inc. CR Rel-16 38.331 16.4.1 2564 - F NR\_newRAT-Core

* [006] Agreed in principle, but cover sheet update acc to comments expected for next meeting

RRC Resume

[R2-2102715](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102715.zip) Corrections to initiation upon reception of RAN paging and T380 Expiry Samsung Electronics Co., Ltd CR Rel-15 38.331 15.13.0 2476 - F NR\_newRAT-Core

- [006] Rap: Not pursued, no spec change required

- [006] Late comment: Ericsson – think we shall consider a Note, keep open for next meeting. Rap: OK to keep open for checking.

* [006] Not agreed
* [006] The UE should not start the 2nd RRC resumption procedure when there is a RRC resumption procedure ongoing

[R2-2103659](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103659.zip) Resume of measurements during the RRC resume procedure Ericsson CR Rel-15 38.331 15.13.0 2524 - F NR\_newRAT-Core

* [006] Not Pursued

[R2-2103660](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103660.zip) Resume of measurements during the RRC resume procedure Ericsson CR Rel-16 38.331 16.4.1 2525 - A NR\_newRAT-Core

* [006] Not Pursued

Abortion of RRC connection est

[R2-2104267](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104267.zip) Clarification on the abortion of RRC connection establishment Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2566 - F NR\_newRAT-Core

- [006] Rapporteur: Some issues should be further discussed, e.g. whether the UE should stay in RRC INACTIVE (e.g. from NAS perspective) and what happens in case the UE still receives RRCSetup or RRCResume after aborting the procedure.

* [006] Postponed

[R2-2104268](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104268.zip) Clarification on the abortion of RRC connection establishment Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2567 - A NR\_newRAT-Core

* [006] Postponed

SCell Index

[R2-2103752](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103752.zip) Clarification on SCellIndex and ServCellIndex NTT DOCOMO, INC. discussion Rel-15

* [006] Noted
* [006] the SCellIndex configured for SCells is also the serving cell index, and the serving cell index for PSCell should be different from that for SCells for a UE.

[R2-2103753](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103753.zip) Clarification on SCellIndex and ServCellIndex NTT DOCOMO, INC. CR Rel-15 38.331 15.13.0 2526 - F NR\_newRAT-Core

* [006] Revised

[R2-2104578](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104578.zip) Clarification on SCellIndex and ServCellIndex NTT DOCOMO, INC. CR Rel-15 38.331 15.13.0 2526 1 F NR\_newRAT-Core

* [006] agreed in principle

[R2-2103754](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103754.zip) Clarification on SCellIndex and ServCellIndex NTT DOCOMO, INC. CR Rel-16 38.331 16.4.1 2527 - A NR\_newRAT-Core

* [006] Revised

R2-2104579 Clarification on SCellIndex and ServCellIndex NTT DOCOMO, INC. CR Rel-16 38.331 16.4.1 2527 1 A NR\_newRAT-Core

* [006] agreed in principle

Processing delay

[R2-2103860](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103860.zip) Clarification on the RRC Processing Delay Apple draftCR Rel-15 38.331 15.13.0 F NR\_newRAT-Core, TEI15

- [006] Chair: not clear whether this is needed or not, most/all? Sub-cases are probably ok with current processing delay. Postponed to allow UE vendors to check whether there is any sub-case for which extension of processing time acc to the proposal would be required.

* [006] postponed

[R2-2103861](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103861.zip) Clarification on the RRC Processing Delay Apple draftCR Rel-16 38.331 16.4.1 A NR\_newRAT-Core, TEI16

* [006] postponed

Withdrawn

R2-2103746 Clarification on RRC full config for intra-SN PSCell change NTT DOCOMO, INC., Ericsson, Fujitsu CR Rel-15 36.331 15.13.0 4619 - F NR\_newRAT-Core Withdrawn

R2-2103748 Clarification on RRC full config for intra-SN PSCell change NTT DOCOMO, INC., Ericsson, Fujitsu CR Rel-16 36.331 16.4.0 4620 - A NR\_newRAT-Core Withdrawn

#### 5.4.1.2 Inter-Node RRC messages

* [AT113bis-e][007][NR15] Inter-Node (Ericsson)

Scope: Treat R2-2102768, R2-2103027, R2-2102769, R2-2103028, R2-2103029, R2-2103028, R2-2103641, R2-2103642, R2-2103801, R2-2103802

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104528](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104528.zip) Summary of [AT113bis-e][007][NR15] Inter-Node Ericsson

* [007] Noted, conclusions taken into account and reflected below

[R2-2102768](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102768.zip) Additional aspects on MN SN config restrictions Nokia, Nokia Shanghai Bell discussion Rel-15

* [007] noted

[R2-2103027](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103027.zip) Further clarify MN and SN configuration restrictions ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

* [007] noted
* [007] In case SN sends the *configRestrictModReq* in SN-initiated SN modification procedure, the MN may do the following actions:

a. Accept the new SN configuration provided in configRestrictModReq with or without echoing explicitly configRestrictInfo.

b. Include a new configRestrictInfo in an MN-initiated SN modification procedure.

c. Reject the new SN configuration provided in *configRestrictModReq* by sending X2/Xn refuse message.

* [007] How to capture the agreed MN-SN configuration restriction in stage 2 is postponed to the next meeting.

[R2-2103028](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103028.zip) CR on MN and SN configuration restriction coordination ZTE Corporation, Sanechips CR Rel-15 37.340 15.12.0 0255 - F NR\_newRAT-Core

* [007] Postponed

[R2-2103029](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103029.zip) CR on MN and SN configuration restriction coordination ZTE Corporation, Sanechips CR Rel-16 37.340 16.5.0 0256 - F NR\_newRAT-Core

* [007] Postponed

[R2-2102769](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102769.zip) Clarification on sCellFrequencies Nokia, Nokia Shanghai Bell discussion Rel-15

* [007] noted
* [007] The fields *scellFrequenciesSN-NR* and *scellFrequenciesSN-EUTRA* are removed from the list in section 11.2.3 of TS 38.331.

[R2-2104539](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104539.zip) Clarification on SCellFrequencies Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.13.0 2571 - F NR\_newRAT-Core

* [007] Agreed in principle

[R2-2104540](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104540.zip) Clarification on SCellFrequencies Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2572 - A NR\_newRAT-Core

* [007] Agreed in principle

[R2-2103228](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103228.zip) Clarification on full and delta configuration signalling for inter-MN handover without SN change Nokia, Nokia Shanghai Bell discussion Rel-15 NR\_newRAT-Core

* [007] noted
* [007] How to signal full or delta configuration in case of an SgNB Addition Request in the scenario of inter-MN handover without SN change is postponed to the next meeting.

[R2-2103641](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103641.zip) Clean-up of INM procedure text Ericsson CR Rel-15 38.331 15.13.0 2515 - F NR\_newRAT-Core

* [007] Postponed

[R2-2103642](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103642.zip) Clean-up of INM procedure text Ericsson CR Rel-16 38.331 16.4.1 2516 - A NR\_newRAT-Core, TEI16

* [007] Postponed

[R2-2103801](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103801.zip) Clarification of mcg-RB-config field description Ericsson CR Rel-15 38.331 15.13.0 2532 - F NR\_newRAT-Core

* [007] Agreed in principle

[R2-2103802](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103802.zip) Clarification of mcg-RB-config field description Ericsson CR Rel-16 38.331 16.4.1 2533 - A NR\_newRAT-Core

* [007] Agreed in principle

#### 5.4.1.3 Other

Including e.g. System Information, RRM and Measurements

* [AT113bis-e][008][NR15] Other & LTE (OPPO)

Scope: Treat R2-2103877, R2-2103878, R2-2104279, R2-2102905, R2-2102906, R2-2102907, R2-2102908, R2-2102903, R2-2102904, R2-2103643, R2-2103644, R2-2102770, R2-2104234, R2-2104238,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104522](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104522.zip) Report of [AT113bis-e][008][NR15] Other & LTE (OPPO) OPPO

* [008] Noted, conclusions taken into account and reflected below

Cell ID

[R2-2103877](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103877.zip) Clarification on CGI reporting Apple draftCR Rel-15 38.331 15.13.0 F NR\_newRAT-Core

* [008] revised

[R2-2104595](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104595.zip) Clarification on CGI reporting Apple CR Rel-15 38.331 15.13.0 2576 - F NR\_newRAT-Core

* [008] Agreed In Principle

[R2-2103878](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103878.zip) Clarification on CGI reporting Apple draftCR Rel-16 38.331 16.4.1 A NR\_newRAT-Core

* [008] revised

[R2-2104596](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104596.zip) Clarification on CGI reporting Apple CR Rel-16 38.331 16.4.1 2577 - A NR\_newRAT-Core

* [008] Agreed In Principle

[R2-2104279](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104279.zip) Discussion on ambiguity of cell ID in RAN sharing vivo discussion Rel-15 NR\_newRAT-Core

- [008] Chair: After further discussion it seems everyone agrees this is currently not clearly specified, and there seems to be support to clarify. Lenovo remains unconvinced that this is needed, and considers that the clarification is for a corner case. In any case there seems to be sufficient support to consider CRs next meeting (let’s see if we manage to agree then). For such case could also discuss whether to clarify for R15 or only for R16.

* [008] Noted, expect discussion conclusion next meeting based on CRs.

SMTC

[R2-2102905](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102905.zip) Clairifcation on field descritpion of SMTC in ReconfigurationWithSync for NR-DC OPPO CR Rel-15 38.331 15.13.0 2484 - F NR\_newRAT-Core

* [008] The second change, for NR-DC is merged with Rapporteur CR

[R2-2102906](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102906.zip) Clairifcation on field descritpion of SMTC in ReconfigurationWithSync for NR-DC OPPO CR Rel-16 38.331 16.4.1 2485 - A NR\_newRAT-Core

* [008] The second change, for NR-DC is merged with Rapporteur CR

[R2-2102907](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102907.zip) Clairifcation on usage of SMTC in the measObjectNR if not configured OPPO CR Rel-15 38.331 15.13.0 2486 - F NR\_newRAT-Core

* [008] Not Pursued

[R2-2102908](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102908.zip) Clairifcation on usage of SMTC in the measObjectNR if not configured OPPO CR Rel-16 38.331 16.4.1 2487 - A NR\_newRAT-Core

* [008] Not Pursued

[R2-2102903](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102903.zip) Clairifcation on SCell without SSB OPPO CR Rel-15 38.331 15.13.0 2482 - F LTE\_NR\_DC\_CA\_enh-Core

* [008] Not Pursued

[R2-2102904](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102904.zip) Clairifcation on SCell without SSB OPPO CR Rel-16 38.331 16.4.1 2483 - A NR\_newRAT-Core

* [008] Not Pursued

CSI measurement

[R2-2103643](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103643.zip) Clarification of CSI measurement configuration Ericsson CR Rel-15 38.331 15.13.0 2517 - F NR\_newRAT-Core

* [008] agreed in principle

[R2-2103644](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103644.zip) Clarification of CSI measurement configuration Ericsson CR Rel-16 38.331 16.4.1 2518 - A NR\_newRAT-Core, TEI16

* [008] agreed in principle

### 5.4.2 LTE changes related to NR

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

[R2-2102770](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102770.zip) Report for [Post113-e][008][NR15] Nokia, Nokia Shanghai Bell report Rel-15

* [008] Noted
* [008] There is interest to send the Draft LS

[R2-2104538](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104538.zip) LS on RI bit width for Cat5 UE in EN-DC mode RAN2 LS out Rel-15 NR\_newRAT-Core To:RAN1

* [008] Approved

[R2-2104234](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104234.zip) Clarification on RRC full config for intra-SN PSCell change NTT DOCOMO, INC., Ericsson, Fujitsu, Huawei, HiSilicon CR Rel-15 36.331 15.13.0 4638 - F NR\_newRAT-Core

Moved from 5.4.1.1

- [008] Chair: There is wide support for this change, but it may force a network implementation change (dep on impl), and Nokia remain unconvinced. Can postpone to allow time to think and also allow opponent to come up with agreeable proposal to resolve the issue if any.

* [008] postponed

[R2-2104238](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104238.zip) Clarification on RRC full config for intra-SN PSCell change NTT DOCOMO, INC., Ericsson, Fujitsu, Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4639 - A NR\_newRAT-Core

Moved from 5.4.1.1

* [008] postponed

### 5.4.3 UE capabilities

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

BCS EN-DC (Continuation)

[R2-2104025](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104025.zip) Discussion on BCS of a fallback band combination Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

DISCUSSION

- Apple think R4 broke this convention by defining lower BWs for fallbacks. Thikn we need to inform R4 this is not correct. Apple are concerned about NBC changes for this. On P1 Apple think also the opposite is possible and preferred.

- QC agrees with Apple. And agrees that the proposed approach may not be safe and/or work. Think we should send an open ended LS to R4 and act based on R4 reply.

- Ericsson agrees with Apple and QC.

- Nokia think that an LS to R4 need to be clear, and the main question is if the UE is allowed to signal a fallback Combination with larger set of channel bandwidths, which would be good.

- vivo think that there is no issue if the UE need to indicate fallbacks if there are largers set of channels BWs the superset.

- Intel think the most important is that fallback bw need ot be supported by superset, and the signalling of the BCS id.

- MTK think from R2 signalling perspective P1 is ok, but think indeed we can check with R4.

- ZTE agrees with Huwei, but indeed think this is complex.

* Noted

Continue offline

[R2-2104212](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104212.zip) Further Clarification on the supportedBandwidthCombinationSet ZTE Corporation, Sanechips discussion Rel-15 NG\_RAN\_PRN-Core

- P2 above mentioned also in this tdoc

* Noted

[R2-2103061](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103061.zip) Reported BCS when IE intraBandENDC-support is set to “both” T-Mobile USA Inc. discussion Rel-16 38.306 TEI16

DISCUSSION

- QC doesn’t see the need to disable. Think that one solution as in this paper (the note) might be ok. MTK agrees with QC, and think that if there is a difference two BCentires are needed. Huawei agrees with QC and MTK. Huawei and MTK think no TS change is needed. ZTE agree sith Huawei.

- Apple agrees but would like to better understand the issue. TMO has heard from chpset suppliers that there may be isseue. Apple wonder if R4 can specify to resolve this. TMO think the signalling is the issue. Apple think that intraband non-cont and intraband cont are different, and think there is no misunderstanding possible.

- Nokia agrees with the other companies. Clarification may be needed.

- Ericsson think informative note is not needed.

* We will not dummify code point “both”

Continue offline to find a clarification if needed (for TS note or Chair notes, most companies seems to not like the idea of a TS note)

* [AT113bis-e][009][NR15] UE caps BCS EN-DC (Huawei)

Scope: Taking into account on-line agreements, Treat R2-2104025, R2-2103061, R2-2104030, R2-2104212, R2-2104213, R2-2104214, R2-2104026, R2-2104027, R2-2104028,

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

Intended outcome: Report and Agreed-in-principle CRs (if possible), Approved LS

Deadline: Schedule A

[R2-2104598](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104598.zip) Summary of [AT113bis-e][009][NR15] UE caps BCS EN-DC Huawei, HiSilicon

Online DISCUSSION

Onlline issue 1

- Apple think we first should have good understanding in R2 about BCS fallback.

- Ericsson agrees, and think this is a R2 topic. However the definition of fallback should be clear to everyone,

- Intel support that R2 should conclude. LTE cap TS is more clear, and NR inherited this. Agree this is a R2 issue. Can have the same interpretation as LTE.

- ZTE also think we wait with sending an LS

- Huawei think that the current TS is not clear, so we need to discuss more.

Online issue 2

- QC think we don’t need to inform R4. Think we don’t need consistency between non-contibgous and contiguous so there is no aspect that need to be informed to R4. Apple agrees and think the LS can clearly state this.

- TMO support to send the LS. Apple are ok to send an LS and it is good that R4 knows how the signalling works.

- Intel and Nokia are ok to send an LS

On-Line agreements:

* We don’t send LS to R4 now on BCS fallback (can consider at later meeting if needed)
* Discussion on BCS fallback is postponed
* Will send LS to inform RAN4 the RAN2 understanding on BCS for contiguous and non-contiguous intra-band (NG)EN-DC
* Short post email discussion for LS approval

[009] Offline agreements:

* [009] RAN2 confirms that supportedBandwidthCombinationSetIntraENDC is signalled to report the intra-band part of “Intra-band (NG)EN-DC/NE-DC BC with LTE inter-band CA and NR single carrier” (no need for specification change)
* [009] RAN2 confirms that to determine whether the UE supports a channel bandwidth of 90 MHz, the network shall also validate *SupportedBandwidthCombinationSetEN-DC*.
* [009] If the UE supports intra-band (NG)EN-DC with contiguous and non-contiguous, and the BCS for contiguous and non-contiguous are the same, the UE can signal “both” in *intraBandENDC-Support* with associated BCS value. If the BCS for contiguous and non-contiguous are different, the UE can signal two BC entries and set “contiguous” and “non-contiguous” separately, with associated BCS value respectively. If no BCS is signalled then the BCS0 is assumed for “both” signalled case. (no need for specification change)
* [Post113bis-e][051][NR15] LS on BCS for contiguous and non-contiguous intra-band EN-DC (Huawei)

Intended outcome: Approved LS out

Deadline: Short

[R2-2104030](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104030.zip) Discussion on contiguous and non-contiguous for intra-band EN-DC Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [009] Noted, discussion postponed awaiting RAN4 conclusion

CRs

[R2-2104213](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104213.zip) CR on the supportedBandwidthCombinationSet-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0565 - F NR\_newRAT-Core

[R2-2104546](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104546.zip) CR on the supportedBandwidthCombinationSet-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0565 1 F NR\_newRAT-Core

* [009] Agreed in principle

[R2-2104214](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104214.zip) CR on the supportedBandwidthCombinationSet-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0566 - A NR\_newRAT-Core

R2-2104547 CR on the supportedBandwidthCombinationSet-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0566 1 A NR\_newRAT-Core

* [009] Agreed in principle

[R2-2104026](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104026.zip) Clarification on BCS of a fallback band combination Huawei, HiSilicon CR Rel-15 38.306 15.13.0 0563 - F NR\_newRAT-Core

[R2-2104027](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104027.zip) Clarification on BCS of a fallback band combination Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0564 - A NR\_newRAT-Core

* [009] Both Postponed

Not Treated

[R2-2104028](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104028.zip) Draft LS on BCS of a fallback band combination Huawei, HiSilicon LS out Rel-16 NR\_newRAT-Core To:RAN4

E-mail disc DL scheduling slot offset

Treat on-line first

* [AT113bis-e][010][NR15] UE caps DL scheduling slot offset (Ericsson)

Scope: Treat R2-2103768, R2-2103770, R2-2103771, R2-2103769, R2-2103799

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104511](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104511.zip) Summary of [AT113bis-e][010][NR15] UE caps DL scheduling slot offset Ericsson

* [010] Noted, conclusions taken into account and reflected below

[R2-2103768](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103768.zip) Summary of [Post113-e][051][NR15] DL scheduling slot offset Ericsson report Rel-15 NR\_newRAT-Core

* [010] Noted

[R2-2103769](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103769.zip) Open issues K0 configuration and use Ericsson discussion Rel-15 NR\_newRAT-Core

* [010] noted
* [010] *SchedulingOffset-PDSCH-TypeA* and *dl-SchedulingOffset-PDSCH-TypeB* capability are added to the UERadioPagingInformation message

**Agreements / Confirmations with no identified TS impact:**

* [010] A UE that does not support dl-SchedulingOffset-PDSCH-TypeA or dl-SchedulingOffset-PDSCH-TypeB capability does support pdsch-TimeDomainAllocationList configuration in PDSCH-ConfigCommon in SIB1 including K0 values larger than 0.
* [010] The network cannot use K0>0 for PDCCH/PDSCH scheduling without possible IOT issues when the network does not know if the UE has IOT-tested K0>0.
* [010] The network configures K0 in *PDSCH-Config* in dedicated signalling according to the UE capabilities

[R2-2103770](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103770.zip) Introduction of DL scheduling slot offset capabilities in UERadioPagingInformation Ericsson CR Rel-15 38.331 15.13.0 2528 - F NR\_newRAT-Core

* [010] agreed in principle

[R2-2103771](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103771.zip) Introduction of DL scheduling slot offset capabilities in UERadioPagingInformation Ericsson CR Rel-16 38.331 16.4.1 2529 - A NR\_newRAT-Core

* [010] agreed in principle

[R2-2103799](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103799.zip) Configuration of common fields in dedicated signalling Ericsson discussion Rel-15 NR\_newRAT-Core

* [010] Clarification of dedicated and common configuration in dedicated signalling is postponed
* [AT113bis-e][011][NR15] UE caps III (ZTE)

Scope: Treat R2-2104185, R2-2104186, R2-2104187, R2-2104188, R2-2102618, R2-2103025, R2-2103026, R2-2102610, R2-2103759, R2-2103760,

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104545](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104545.zip) Email discussion summary of [AT113bis-e][011][NR15] UE caps III (ZTE) ZTE

* [011] Noted, conclusions taken into account and refelected below

Intra-band and Inter-band EN-DC Capability

[R2-2104185](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104185.zip) Clarification on the Intra-band and Inter-band EN-DC Capabilities ZTE Corporation, Sanechips discussion Rel-15 NG\_RAN\_PRN-Core R2-2101562

* [011] Noted
* [011] (chair notes only) Ran2 confirm that the intra-band (NG)EN-DC/NE-DC combination in 38306 means the (NG)EN-DC/NE-DC band combinations that supporting at least one EUTRA downlink serving cell and one NR downlink serving cell in the same band (irrespective of SPcell or Scell). For other cases, it would be defined as inter-band (NG)EN-DC/NE-DC combination.
* [011] Send a LS to Ran 4/1 to confirm for which BC types the ul-TimingAlignmentEUTRA-NR/ dualPA-Architecture/ pa-PhaseDiscontinuityImpacts/asyncIntraBandENDC/ simultaneousRxTxInterBandENDC shall be adopted respectively. In the LS, also include the below 5 BC types:

Type 1: Intra-band (NG)EN-DC/NE-DC combination without additional inter-band NR and LTE CA component, e.g. DC **41A\_n41A**

Type 2: Intra-band (NG)EN-DC/NE-DC combination supporting both UL and DL intra-band (NG)EN-DC/NE-DC parts with additional inter-band NR/LTE CA component, e.g. DC\_25A\_**41A\_n41A**

Type 3: Intra-band (NG)EN-DC/NE-DC combination without supporting UL in both the bands of the intra-band (NG)EN-DC/NE-DC UL part, e.g. DC\_**25A**\_41A\_**n41A**

Type 4: Inter-band (NG)EN-DC/NE-DC combination without Intra-band component, in short we call it as Inter-band (NG)EN-DC/NE-DC combination.

Type 5: Inter-band (NG)EN-DC combination configurations where the frequency range of the E-UTRA band is a subset of the frequency range of the NR band, e.g., DC\_B42\_n77 and DC\_B42\_n78.

[R2-2104188](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104188.zip) Draft LS on the Intra-band and Inter-band EN-DC Capabilities ZTE Corporation, Sanechips LS out Rel-15 NR\_newRAT-Core R2-2101565 To:RAN4

* [011] revised

[R2-2104550](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104550.zip) Draft LS on the Intra-band and Inter-band EN-DC Capabilities ZTE Corporation, Sanechips LS out Rel-15 NR\_newRAT-Core R2-2101565 To:RAN4

* [011] approved

[R2-2104186](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104186.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 1 F NR\_newRAT-Core R2-2101563

[R2-2104187](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104187.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 1 A NR\_newRAT-Core R2-2101564

* [011] Both Postponed

Cross-Carrier Operation

[R2-2102618](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102618.zip) LS on Interpretation of UE Features in Case of Cross-Carrier Operation (R1-2102085; contact: ZTE) RAN1 LS in Rel-15 NR\_newRAT-Core To:RAN2

Moved from 5.1

* [011] Noted

[R2-2103025](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103025.zip) CR on UE capability in case of Cross-Carrier operation ZTE Corporation, Sanechips, Ericsson CR Rel-15 38.306 15.13.0 0544 - F NR\_newRAT-Core

* [011] revised

R2-2104607 CR on UE capability in case of Cross-Carrier operation ZTE Corporation, Sanechips, Ericsson CR Rel-15 38.306 15.13.0 0544 1 F NR\_newRAT-Core

* [011] Agreed in principle

[R2-2103026](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103026.zip) CR on UE capability in case of Cross-Carrier operation ZTE Corporation, Sanechips, Ericsson CR Rel-16 38.306 16.4.0 0545 - A NR\_newRAT-Core

* [011] revised

R2-2104608 CR on UE capability in case of Cross-Carrier operation ZTE Corporation, Sanechips, Ericsson CR Rel-16 38.306 16.4.0 0545 1 A NR\_newRAT-Core

* [011] Agreed in principle

**Simultaneous CSI-RS resources**

[R2-2102610](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102610.zip) Reply LS on the use of simultaneous CSI-RS resources and ports (R1-2101962; contact: Ericsson) RAN1 LS in Rel-15 NR\_newRAT-Core To:RAN2

Moved from 5.1

* [011] noted

[R2-2103759](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103759.zip) Correction to the use of simultaneous CSI-RS resources Ericsson, Nokia CR Rel-15 38.306 15.13.0 0552 - F NR\_newRAT-Core

* [011] agreed in principle

[R2-2103760](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103760.zip) Correction to the use of simultaneous CSI-RS resources Ericsson, Nokia CR Rel-16 38.306 16.4.0 0553 - A NR\_newRAT-Core

* [011] agreed in principle
* [AT113bis-e][012][NR15] UE caps IV (Mediatek)

Scope: Treat R2-2102644, R2-2104084, R2-2104087, R2-2104029, R2-2103633, R2-2102623, R2-2104098, R2-2104101, R2-2103115, R2-2103116, R2-2103634, R2-2103635, R2-2103791, R2-2103792, R2-2104021, R2-2104022

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

[R2-2104556](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104556.zip) Report of e-mail discussion [AT113bis-e][012][NR15] UE caps IV (Mediatek) Mediatek Inc.

* [012] Noted, conclusions taken into account and reflected below

**Single Uplink Operation**

[R2-2102644](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102644.zip) LS to RAN2 on single-uplink operation in more than one band pair of a band combination (R4-2103144; contact: MediaTek) RAN4 LS in Rel-15 NR\_newRAT-Core, LTE\_NR\_DC\_CA\_enh-Core To:RAN2 Cc:-

Moved from 5.1

* [012] Noted

[R2-2104084](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104084.zip) Discussion on SUO capability in more than one band pair of a BC MediaTek Inc. discussion Rel-15

* [012] Noted

[R2-2104029](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104029.zip) Discussion on single-uplink operation in more than one band pair of a BC Huawei, HiSilicon, Ericsson discussion Rel-15 NR\_newRAT-Core

* [012] Noted

[R2-2103633](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103633.zip) Support of more than one singleUL per band combination Nokia, Nokia Shanghai Bell discussion Rel-15 NR\_newRAT-Core

* [012] Noted
* [012] RAN2 confirms that *singleUL-Transmission* could not indicate dual UL in one UL CC pair and single UL in another CC pair in one band combination. However, with the ASN.1 signalling from Rel-15, UE is able to indicate dual UL transmission capability in one UL CC pair and single UL transmission capability in another CC pair in different band combination entries. RAN2 does not plan to implement additional solutions.
* [012] Send LS to RAN4 based on the conclusion above

[R2-2104087](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104087.zip) Reply LS on single-uplink operation in more than one band pair of a band combination MediaTek Inc. LS out NR\_newRAT-Core To:RAN4

* [012] revised

[R2-2104557](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104557.zip) Reply LS on single-uplink operation in more than one band pair of a band combination MediaTek Inc. LS out NR\_newRAT-Core To:RAN4

* [012] Approved

SCS of active DL/UL BWP

[R2-2102623](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102623.zip) LS on numerology for active DL and UL BWPs (R1-2102152; contact: MediaTek) RAN1 LS in Rel-15 NR\_newRAT-Core To:RAN2

Moved from 5.1

* [012] Noted

[R2-2104098](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104098.zip) Clarification on SCS of active DL and UL BWP MediaTek Inc. CR Rel-15 38.331 15.13.0 2549 - F NR\_newRAT-Core

Moved from 5.4.1.1

* [012] revised

[R2-2104558](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104558.zip) Clarification on SCS of active DL and UL BWP MediaTek Inc. CR Rel-15 38.331 15.13.0 2549 1 F NR\_newRAT-Core

* [012] Agreed in principle

[R2-2104101](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104101.zip) Clarification on SCS of active DL and UL BWP MediaTek Inc. CR Rel-16 38.331 16.4.1 2550 - A NR\_newRAT-Core

Moved from 5.4.1.1

* [012] revised

R2-2104559 Clarification on SCS of active DL and UL BWP MediaTek Inc. CR Rel-16 38.331 16.4.1 2550 1 A NR\_newRAT-Core

* [012] Agreed in principle

[R2-2103634](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103634.zip) Correction to BWP capabilities Nokia, Nokia Shanghai Bell CR Rel-15 38.306 15.13.0 0549 - F NR\_newRAT-Core

* [012] revised

R2-2104573 Correction to BWP capabilities Nokia, Nokia Shanghai Bell CR Rel-15 38.306 15.13.0 0549 1 F NR\_newRAT-Core

* [012] Agreed in principle

[R2-2103635](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103635.zip) Correction to BWP capabilities Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.4.0 0550 - A NR\_newRAT-Core

* [012] revised

R2-2104574 Correction to BWP capabilities Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.4.0 0550 1 A NR\_newRAT-Core

* [012] Agreed in principle

[R2-2103115](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103115.zip) Correction on Numerology for Active DL and UL BWPs Rel-15 CATT draftCR Rel-15 38.306 15.13.0 F NR\_newRAT-Core

[R2-2103116](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103116.zip) Correction on Numerology for Active DL and UL BWPs Rel-16 CATT draftCR Rel-16 38.306 16.4.0 A NR\_newRAT-Core

[R2-2103791](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103791.zip) Correction on bwp-DiffNumerology ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0557 - F NR\_newRAT-Core

[R2-2103792](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103792.zip) Correction on bwp-DiffNumerology ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0558 - A NR\_newRAT-Core

[R2-2104021](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104021.zip) CR on numerology for active DL and UL BWPs Huawei, HiSilicon CR Rel-15 38.306 15.13.0 0559 - F NR\_newRAT-Core

[R2-2104022](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104022.zip) CR on numerology for active DL and UL BWPs Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0560 - A NR\_newRAT-Core

* [012] 6 tdocs not pursued
* [AT113bis-e][013][NR15] UE caps V (QC)

Scope: Treat R2-2103761, R2-2103762, R2-2103763, R2-2104096, R2-2104232, R2-2104233, R2-2104257, R2-2104258, R2-2104259, R2-2104260, R2-2104281, R2-2104283

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

Intended outcome: Report and Agreed-in-principle CRs.

Deadline: Schedule A

Fallback per CC feature set

[R2-2103761](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103761.zip) Remaining aspects for definition of fallback per CC feature set Ericsson discussion

- [013] ph1 Rapporteur: Most companies at least agreed the observations in the document. It was however not clear whether any change to RAN2 specification was necessary.Moderator would like to propose to go for the suggestion from the proponent, to send an LS to RAN1 and RAN4 describing RAN2’s understanding on “Fallback per CC feature set”. No RAN2 specification change is pursued in this RAN2 meeting. The need of it can be revisited after RAN2 has received responses from RAN1 and RAN4.

* [013] Noted
* [013] Send an LS to RAN1 and RAN4 describing RAN2s understanding on Fallback per CC feature set

[R2-2104603](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104603.zip) LS on fallback applicability for UE FeatureSetDownLinkPerCC capability fields RAN2 LS out

* [013] Approved

CSI Report Framework

[R2-2103762](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103762.zip) Ambiguity in fr1-fr2-Add-UE-NR-Capabilities parameter Ericsson CR Rel-15 38.306 15.13.0 0554 - F NR\_newRAT-Core

- [013] ph1 Rapporteur: Moderator did not see sufficient support for the proposed CRs, and therefore proposes not to pursue the CRs.

* [013] Not Pursued

[R2-2103763](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103763.zip) Ambiguity in fr1-fr2-Add-UE-NR-Capabilities parameter Ericsson CR Rel-16 38.306 16.4.0 0555 - F NR\_newRAT-Core

* [013] Not Pursued

Maximum DRB number

[R2-2104096](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104096.zip) Missing support of maximum DRB number Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

- [013] ph1 Rapporteur: Moderator did not see sufficient support for the proposed CR, and therefore proposes not to pursue the CR. Moderators observation is that actual use cases may have to be clarified for the proposal to be reconsidered in the future.

* [013] Noted, Proposals not pursued

XDD/FRX for CG

[R2-2104609](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104609.zip) UL Config Grant capability differentiation for FR1(TDD/FDD) / FR2 Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2579 - F NR\_newRAT-Core, TEI16

* [013] agreed in principle

[R2-2104610](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104610.zip) UL Config Grant capability differentiation for FR1(TDD/FDD) / FR2 Qualcomm Incorporated CR Rel-16 38.306 16.4.0 0571 - F NR\_newRAT-Core, TEI16

* [013] agreed in principle

Wrong allocation in 3GU:

[R2-2104232](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104232.zip) UL Config Grant capability differentiation for FR1(TDD/FDD) / FR2 Qualcomm Incorporated CR Rel-16 36.331 16.4.0 4637 - F NR\_newRAT-Core, TEI16

[R2-2104233](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104233.zip) UL Config Grant capability differentiation for FR1(TDD/FDD) / FR2 Qualcomm Incorporated CR Rel-16 36.306 16.4.0 1807 - F NR\_newRAT-Core, TEI16

IMS Video

[R2-2104257](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104257.zip) IMS video capabilities Google Inc. CR Rel-15 38.306 15.13.0 0569 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

- [013] Moderator did not see sufficient support for the proposed CR, and therefore proposes not to pursue the CR. It is moderators understanding that the existing UE capabilities related to IMS voice were introduced by RAN2 to indicate UEs AS specific implementation of IMS voice, and some of the capabilities are used by the network for mobility decision, e.g. indication of IMS voice support over EUTRA/5GC which is signalled in NR UE capability. It was not entirely clear to moderator what companies are suggesting to confirm with CT1.

[R2-2104258](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104258.zip) IMS video capabilities Google Inc. CR Rel-16 38.306 16.4.0 0570 - A NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2104259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104259.zip) IMS video capabilities Google Inc. CR Rel-15 36.306 15.10.0 1808 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2104260](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104260.zip) IMS video capabilities Google Inc. CR Rel-16 36.306 16.4.0 1809 - A NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2104281](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104281.zip) IMS video capabilities Google Inc. CR Rel-15 36.331 15.13.0 4642 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2104283](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104283.zip) IMS video capabilities Google Inc. CR Rel-16 36.331 16.4.0 4643 - A NR\_newRAT-Core, LTE\_5GCN\_connect-Core

* [013] 6 CRs not pursued

SimultaneousRxTx in NR-DC

Sent LS last time. Postpone to allow R4 to conclude

[R2-2104023](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104023.zip) Clarification on the simultaneousRxTxInterBandCA capability in NR-DC Huawei, HiSilicon CR Rel-15 38.306 15.13.0 0561 - F NR\_newRAT-Core

[R2-2104024](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104024.zip) Clarification on the simultaneousRxTxInterBandCA capability in NR-DC Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0562 - A NR\_newRAT-Core

### 5.4.4 Idle/inactive mode procedures

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions, out of coverage, etc) are covered under RRC agenda items (5.4.1.x)

## 5.5 Positioning corrections

Corrections to both the stage 2 and stage 3 aspects related to positioning. Stage 2 CRs shall be discussed with the specification rapporteur (Sven Fischer sfischer@qti.qualcomm.com) before submission. Stage 2 CRs not discussed with the specification rapporteur will not be treated.

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

[R2-2103219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103219.zip) Correction on SUPL support of positioning methods Samsung CR Rel-15 38.305 15.8.0 0070 - F UTRA\_LTE\_iPos\_enh2-Core

[R2-2103220](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103220.zip) Correction on SUPL support of positioning methods Samsung CR Rel-16 38.305 16.4.0 0071 - A UTRA\_LTE\_iPos\_enh2-Core

# 6 Rel-16 NR Work Items

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

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

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

## 6.1 Common

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

Includes the following WIs and input that doesn’t fit elsewhere.

(NR\_IAB-Core; leading WG: RAN2; REL-16; started: Dec 18; target Aug 20; WID: RP-200840)

(NR\_unlic-Core; leading WG: RAN1; REL-16; started: Dec 18; Closed June 20; WID: RP-192926).

(NR\_IIOT-Core; leading WG: RAN2; REL-16; started: Mar 19; Completed: Jun 20; WID: RP-200797)

(NR\_UE\_pow\_sav-Core; leading WG: RAN1; REL-16; started: Mar 19; Completed Jun 20; WID: RP-200494).

(NR\_2step\_RACH-Core; leading WG: RAN1; REL-16; started: Dec 18; Completed: June 20; WID: RP-200085).

(SRVCC\_NR\_to\_UMTS-Core; leading WG: RAN2; REL-16; started: Dec 18; Completed; Mar 20; WID: RP-190713)

(RACS-RAN-Core, leading WG: RAN2; REL-16; started: Mar 19; completed: Jun 20; WID: RP-191088)

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; completed: June 20; WID: RP-200122)

(NR\_eMIMO-Core, leading WG: RAN1; REL-16; started: Jun 18; target; Aug 20; WID: RP-200474;)

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; Completed: Jun 20; WID: RP-191997;)

(NR\_L1enh\_URLLC-Core, leading WG: RAN1; REL-16; Completed: June 20; WID: RP-191584)

(NR\_HST, NR\_RRM\_enh-Core, NR\_RF\_FR1, NR\_RF\_FR2\_req\_enh, NR\_n66\_BW, LTE\_NR\_B41\_Bn41\_PC29dBm-Core, NR\_CSIRS\_L3meas,)

(NR TEI16).

### 6.1.1 Organisational

Incoming LSs, etc.

[R2-2102662](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102662.zip) Reply LS on UTRAN UE capabilities from CN to gNB (S2-2101596; contact: Qualcomm) SA2 LS in Rel-16 SRVCC\_NR\_to\_UMTS-Core, RACS-RAN-Core To:RAN2 Cc:CT3

Proposed Noted [000]

* [000] Noted

No Action

[R2-2102612](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102612.zip) LS on updated Rel-16 RAN1 UE features lists for NR after RAN1#104-e (R1-2102007; contact: NTT DOCOMO, AT&T) RAN1 LS in Rel-16 TEI16, 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, NR\_CLI\_RIM-Core To:RAN2, RAN4

Chair: Already taken into account. Propose Noted [000]. Moved here.

* [000] Noted

[R2-2102616](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102616.zip) LS on uplink Tx switching (R1-2102058; contact: China Telecom) RAN1 LS in Rel-16 NR\_RF\_FR1-Core To:RAN2 Cc:RAN4

Chair: Already taken into account. Propose Noted [000].

* [000] Noted

[R2-2102675](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102675.zip) LS Reply on QoS Monitoring for URLLC (S5-211350; contact: Intel) SA5 LS in Rel-16 To:RAN3 Cc:SA2, RAN2

Chair: RAN2 is CC’ed, no action. Propose Noted [000].

* [000] Noted

[R2-2102677](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102677.zip) Reply LS on 3GPP NR Rel-16 URLLC and IIoT performance evaluation (RP-210884; contact: Ericsson) RAN LS in Rel-16 To:5GACIA Cc:RAN1, RAN2, SA1

Chair: RAN2 is CC’ed, no action. Propose Noted [000].

* [000] Noted

### 6.1.2 Stage 2 corrections

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

* [AT113bis-e][014][NR16] Stage-2 (Xiaomi)

Scope: Treat R2-2102609, R2-2103640, R2-2104218, R2-2104219, R2-2103848, R2-2103880, R2-2104172, R2-2104208, R2-2104209, R2-2104252, R2-2103557, R2-2104015

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

Intended outcome: Report and Agreed-in-principle CRs, Approved LS out if applicable

Deadline: Schedule A

#### 6.1.2.1 TS 3x.300

eMIMO

[R2-2102609](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102609.zip) Reply LS on multi-TRP description in Stage-2 (R1-2101924; contact: Nokia) RAN1 LS in Rel-16 NR\_eMIMO-Core To:RAN4, RAN2

* [014] Noted

[R2-2103640](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103640.zip) Updated Multi-TRP Stage-2 description Nokia (rapporteur) CR Rel-16 38.300 16.5.0 0359 - F NR\_eMIMO-Core

* [014] Agreed in principle

[R2-2104218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104218.zip) Clarifications on the TRP definition for eMIMO and positioning Xiaomi Communications, Samsung, OPPO CR Rel-16 38.300 16.5.0 0367 - F NR\_eMIMO-Core

* [014] Not pursued

[R2-2104219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104219.zip) Clarifications on the TRP definition for eMIMO and positioning Xiaomi Communications, Samsung, OPPO, ZTE Corporation CR Rel-16 38.331 16.4.1 2560 - F NR\_eMIMO-Core

* [014] revised

R2-2104618 Clarifications on the TRP definition for eMIMO and positioning Xiaomi Communications, Samsung, OPPO, ZTE Corporation CR Rel-16 38.331 16.4.1 2560 1 F NR\_eMIMO-Core

* [014] agreed in principle

SRVCC

[R2-2103048](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103048.zip) Addition of size limitation for SRVCC Ericsson CR Rel-16 38.300 16.5.0 0352 - F SRVCC\_NR\_to\_UMTS

* [014] revised

R2-2104617 Addition of size limitation for SRVCC Ericsson CR Rel-16 38.300 16.5.0 0352 1 F SRVCC\_NR\_to\_UMTS

* [014] Agreed in principle

NR-U

[R2-2103880](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103880.zip) Clarification on NR-U deployment scenarios Apple draftCR Rel-16 38.300 16.5.0 F NR\_unlic-Core

- [014] ph1 Rapporteur: The CR in R2-2103880 is not pursued. In phase 2, the missing scenario for NR-U deployment can be double checked with the 2-stage rapporteur and merged with a general stage-2 CR.

* [014] Not pursued

IAB

[R2-2104172](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104172.zip) Missing IAB SA mode for QoS description Samsung R&D Institute UK CR Rel-16 38.300 16.5.0 0366 - F NR\_IAB-Core

* [014] revised

R2-2104647 Missing IAB SA mode for QoS description Samsung R&D Institute UK CR Rel-16 38.300 16.5.0 0366 1 F NR\_IAB-Core

* [014] Agreed

TEI16 correction

[R2-2104208](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104208.zip) Discussion on 2-step release with redirect without anchor change ZTE corporation, Sanechips discussion Rel-16 NR\_newRAT-Core, TEI16

* [014] Noted
* [014] It is RAN2 understanding that the 2-step release with redirect without anchor change as discussed in R2-2104208 is up to RAN3 to decide.

[R2-2104209](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104209.zip) Draft stage-2 CR for 2-step release with redirection without anchor change ZTE corporation, Sanechips draftCR Rel-16 38.300 16.5.0 NR\_newRAT-Core, TEI16

[R2-2104252](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104252.zip) Draft LS on 2-step release with redirect without anchor change ZTE corporation, Sanechips LS out Rel-16 NR\_newRAT-Core, TEI16 To:RAN3

* [014] Both Noted

Withdrawn

R2-2103636 Updated Multi-TRP Stage-2 description Nokia (rapporteur) CR Rel-17 38.300 16.5.0 0358 - F NR\_feMIMO-Core Withdrawn

#### 6.1.2.2 TS 37.340

IAB

[R2-2103557](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103557.zip) Clarification on IP packet type in DedicatedInfoF1c Nokia, Nokia Shanghai Bell CR Rel-16 37.340 16.5.0 0258 - F NR\_IAB-Core

* [014] Agreed in principle

Misc Corrections

[R2-2104015](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104015.zip) Miscellaneous corrections on DCCA, 2-step RACH, IIOT, IAB ZTE Corporation(Rapporteur) CR Rel-16 37.340 16.5.0 0261 - F LTE\_NR\_DC\_CA\_enh-Core, NR\_2step\_RACH-Core, NR\_IAB-Core, NR\_IIOT-Core

* [014] revised

[R2-2104611](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104611.zip) Miscellaneous corrections on DCCA, 2-step RACH, IIOT, IAB ZTE Corporation(Rapporteur) CR Rel-16 37.340 16.5.0 0261 1 F LTE\_NR\_DC\_CA\_enh-Core, NR\_2step\_RACH-Core, NR\_IAB-Core, NR\_IIOT-Core

* [014] agreed in principle

### 6.1.3 User Plane corrections

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

#### 6.1.3.1 MAC

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

Email Discussion

Treat On-Line

[R2-2103959](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103959.zip) Report of [Post113-e][052][NR16] cgRetxTimer (Qualcomm) Qualcomm Incorporated report

DISCUSSION

- QC think there is no ambiguity. Ericsson agrees,

- LG think P2 may be an issue, thkink also P1 need clarification.

- Apple think we have already agreed that these are not meant to work together, as this is discussed in Rel-17. E.g. HARQ process ID is handled differently. Not clear how serious the issues are, maybe it could be made to work. Prefer to make clear in the TS ain R17

- Samsung think the text for the two features were individually written without considering the other and this is needed. Don’t see the need to configure both simultaneously.

- Huawei also think we already have agreed to not configure these simultaneously

- Xiaomi think we need to answer all Q listed in P1 to be sure these can work and be IOT tested.

- ZTE think may things may not work, timer is broken, and think that transmissions are different.

- Oppo think NR-U and IIOT was done separately and there is no need to fix this in R16. Initial TX and RETX assumptions are different and need to be aligned.

- IDT think there are no error cases if they are both configured. Think we don’t need any CRs and we can rely on the network to handle this.

- Lenovo think indeed different UE implementations would behave differently can stick

- CATT think that the retransmission priority is not clear, and don’t want to work on this for R16. Nokia think CATT comment is applicable.

- Fujitsu agree that we should not configure both.

- Google also think we should be clear that these are not configured simultaneously

**Chair Observation**: Many companies think there are ambiguities on several points, and it is unlikely that UEs of different would behave consistently. It seems difficult to make detailed IOT test cases.

* R2 Confirm the assumption that network implementation is to handle the potential ambiguities for R16 UEs, e.g. by not configuring both features at the same time (*cg-RetransmissionTimer* and *autonomousTransmission*). R2 will not further work on this for R16 UEs. No R16 CRs are expected.

[R2-2104217](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104217.zip) IIOT NR-U co-existence in Rel-16 LG Electronics UK discussion TEI16

* Noted

Overlapping UCI(s), Data and SR of equal priority and UL skipping

[R2-2102628](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102628.zip) LS on UL skipping for PUSCH in Rel-16 (R1-2102249; contact: vivo) RAN1 LS in Rel-16 TEI16, NR\_newRAT-Core To:RAN2

moved from 5.1

- vivo understand that this LS bring no additional MAC change.

* noted

[R2-2102626](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102626.zip) Reply LS on overlapped data and SR are of equal L1 priority (R1-2102244; contact: vivo) RAN1 LS in Rel-16 NR\_IIOT-Core To:RAN2

moved from 6.1.1

SR

- vivo think that MAC layer is not aware of the final resource of SR etc.

- Oppo think there is a dependency between L1 and MAC as L1 decides based on MAC decision, e.g. PUCCH format.

- MTK think MAC is written fuzzy e.g. doesn’t say whether info is configured or L1 chosen, e.g. in order to do UL skipping MAC need to be aware of L1, and MAC/L1 are quite tight coupled, MAC can be aware.

- Samsung think that PUCCH PUSCH conflicts are explicit and MAC cannot determine other conflicts. MAC is not aware of PUCCH resource.

- ZTE think MAC is aware, DRX Note about CSI-RS reporting refers to CSI-RS resources co-inciding with DRX active time. ZTE think MAC can be aware. Think we need to consider the chicken egg problem. CATT think there is no chicken-egg issue, and the time-line shows that UCI multiplexing is already known in the UE when MAC intra-UE-prioritzation is done, so the UE can know. Agree with ZTE that MAC is aware of L1 and there are several examples in the TS.

- Huawei don’t think MAC is aware of everything, think we can choose whether MAC need to know.

- Apple are not sure, whether we need to modify the Phy MAC interface. Chair think we never attempted to specify a MAC Phy interface.

- Ericsson think MAC cannot know the final PUCCH resource.

- LG would like the specification to be as simple as possible i.e. independent in this case.

- Lenovo think the interlayer interaction was never specified in detail, and we always left MAC a bit fuzzy. Qc agrees with this, and current MAC design doesn’t rule out.

- Nokia think MAC doesn’t need to know what is the final resource.

- IDT think the understanding 1 gives the least impact, not sure whether there will need to be any change, e.g. for retriggering maybe SR is just delayed.

- CATT think that Understanding 2 is the current behaviour. MTK agrees.

- Samsung think the impact to UE impl is different.

Chair: A TS can refer to a condition where the details are specified in another TS. This is usually done by fuzzy reference, so it seems that both interpretations are possible (without adding L1 specific details in MAC or vice versa).

Chair: Understanding 1: If we assume that MAC just generate SR and let L1 decide if/by what resource to transmit it, if the SR is not transmitted in the end then MAC may need to know this, in order to re-trigger the SR.

Chair: Understanding 2: If we assume that MAC (the UE) can first know whether SR can be transmitted or not, then the current TS works.

LCH based prio vs UL skipping

- vivo and Apple think that LCH based prio has higher priority than UL skipping. Ericsson think the opposite makes sens, and think there is a real usecase that the network has an issue with the WA. Ericsson think we cannot agree to this. Samsung think that the double detection issue will be discussed in R1 and think R2 can change if required.

- LG think that MAC awareness of L1 can be a guiding principle for both questions.

* Confirm the WA that LCH based prio has higher priority than UL skipping still applies, and we expect that if there are issues, RAN1 will come-back.

Attempt to progress offline, CB on-line if needed

* [AT113bis-e][015][NR16] Overlapping UCI Data and SR of equal priority and UL skipping (vivo)

Scope: Take into account on-line progress, Take into account R2-2102628, R2-2102626, R2-2102724, R2-2102759, R2-2102754, R2-2103381, R2-2103481, R2-2103846, R2-2103847, R2-2102775, R2-2103067, R2-2103426, R2-2103208, R2-2103439, R2-2103440, R2-2102776, R2-2103845, R2-2104054

Determine agreeable parts, make decisions for Reply LS to RAN1. For parts with incomplete conclusions, pave the way for on-line CB

Intended outcome: Report, approved LS out,

Deadline: Monday April 19 (if needed CB April 20)

[R2-2104631](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104631.zip) Report of [AT113bis-e][015][NR16] Overlapping UCI Data and SR of equal priority and UL skipping vivo

DISCUSSION

- Chair wonder if there is a variant still on the table that the UE can take into account UCI multiplexing? Samsung think this option was supported only by a few companies and this can be discarded

- Samsung think option 1 is the simplest,

- ZTE think MAC can be aware, and can compromise to Option 2.

- Chair think we need a more fundamental discussion on cross-layer interaction between MAC and L1.

- LG think option 1 is the best way, Option 2 is not good.

- MTK think O1 is simplest for MAC but not the simplest for the UE as MAC makes a decision and then L1 decides differently and the result is not simple.

- Chair: Observe that option 1 has wide support.

- Chair propose to: Postpone this specific issue (MAC awareness of UCI for this case), invite for a more principal discussion on MAC L1 dependencies next meeting.

- vivo think we shold avoid NBC changes

- Apple think this was complex, think understanding 1 is the case. Think this will not change.

- Nokia think O1 is the one that is simplest for gNB and think we cannot postpone for long.

- Huawei are ok to have a general discussion, but think R1 expects a reply. Think we can ask R1 whether UE can choose behaviour. Not in favour of option 2 at all.

- Intel prefer to define clear UE behaviour and think this is not stable yet.

- Ericsson agrees that we should not postpone for long would be ok to say that UL skipping and LCH based prioritization cannot be configured in thie release.

- Oppo think R1 already wait for our reply think O1

- CATT think in principle we should postpone but we are late and there are different UE implemetations.

* Postpone this issue

Vivo suggest a small reply LS

- Ericsson think it is not needed as R2 WA has already been assumed in the R1 email discussion.

- Chair: No LS

[R2-2102724](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102724.zip) Analysis of RAN1 reply LS on overlapped SR and data CATT discussion NR\_IIOT-Core

[R2-2102759](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102759.zip) Remaining issues on overlapped PUSCH and UCI with UL skipping vivo discussion NR\_IIOT-Core

[R2-2103481](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103481.zip) MAC behaviour for overlapped UCI(s), SR and PUSCH with equal L1 priority Huawei, HiSilicon discussion NR\_IIOT-Core

[R2-2103846](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103846.zip) Overlapped SR and PUSCH of equal L1 priority Apple discussion Rel-16 NR\_IIOT-Core

[R2-2103847](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103847.zip) Treatment of overlapping SR/Data Apple discussion Rel-16 NR\_IIOT-Core

[R2-2102775](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102775.zip) Discussion on overlapped data and SR with equal PHY priority Samsung discussion Rel-16 NR\_IIOT-Core

[R2-2103067](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103067.zip) LCH based prioritization for SR and PUSCH Intel Corporation discussion Rel-16 NR\_IIOT-Core

[R2-2103426](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103426.zip) Remaining corrections for Intra-UE prioritization Ericsson discussion Rel-16 NR\_IIOT-Core

[R2-2103208](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103208.zip) Discussion on reply LS on overlapped data and SR are of equal L1 priority OPPO discussion Rel-16 NR\_IIOT-Core

[R2-2103439](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103439.zip) Considerations on the intra-UE multiplexing coupled with PUCCH transmission ZTE Corporation, Sanechips discussion Rel-16 NR\_IIOT-Core

[R2-2103440](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103440.zip) Correction to 38.321 on intra-UE multipexing involved PUCCH transmission ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1087 - F NR\_IIOT-Core

[R2-2102776](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102776.zip) UL Skipping with LCH-based Prioritization Samsung discussion Rel-16 NR\_IIOT-Core

[R2-2103845](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103845.zip) UL skipping and intra-UE prioritization Apple discussion Rel-16 NR\_IIOT-Core

[R2-2104054](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104054.zip) RAN2 impact of Case 1-6 for UL skipping Huawei, HiSilicon discussion Rel-16 TEI16

* [015] 14 tdocs above are noted

[R2-2103381](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103381.zip) Correction to PUSCH skipping with UCI for NR-U Nokia, Nokia Shanghai Bell CR Rel-16 38.321 16.4.0 1084 - F NR\_unlic-Core

* [015] Not Pursued

[R2-2102754](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102754.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

* [AT113bis-e][016][NR16] MAC II (Samsung)

Scope: Treat R2-2102774, R2-2102723, R2-2102845, R2-2103427, R2-2103435, R2-2102791, R2-2102778, R2-2103436, R2-2102763,

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

[R2-2104544](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104544.zip) Report of Offline 016: MAC II (Samsung) Samsung

* [016] Noted, conclusions taken into account and reflected below

Bundling related

*Treat by email, if needed CB on-line.*

[R2-2102774](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102774.zip) CG Bundle Configured with AutonomousTx Samsung discussion Rel-16 NR\_IIOT-Core

[R2-2102723](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102723.zip) Autonomous transmission and bundling CATT discussion NR\_IIOT-Core

[R2-2102845](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102845.zip) Discussion on CGT handling in the case of autonomous transmission and bundling Huawei, HiSilicon discussion Rel-16 NR\_IIOT-Core

[R2-2103427](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103427.zip) CG timer handling upon de-prioritization of bundled PUSCH Ericsson discussion Rel-16 NR\_IIOT-Core

[R2-2103435](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103435.zip) Consideration on the CGT behavior for CG bundling transmission ZTE Corporation, Sanechips discussion Rel-16 NR\_IIOT-Core

* [016] 5 tdocs Noted
* [016] RAN2 will not further optimize CG bundle operation configured with AutonomousTx in Rel-16.

[R2-2102791](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102791.zip) Corrections on MAC handling of uplink grants within a bundle CATT CR Rel-16 38.321 16.4.0 1070 - F NR\_IIOT-Core

* [016] Note on delivery of CG bundle proposed by R2-2102791 is not pursued.
* [016] Correction on checking overlapped resource for retransmission of bundle proposed by R2-2102791 is agreed.
* [016] revised

[R2-2104541](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104541.zip) Corrections on MAC handling of uplink grants within a bundle CATT CR Rel-16 38.321 16.4.0 1070 1 F NR\_IIOT-Core

* [016] agreed in principle

[R2-2102778](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102778.zip) CG Bundle Configured with LCH-based Prioritization Samsung CR Rel-16 38.321 16.4.0 1069 - F NR\_IIOT-Core

[R2-2103436](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103436.zip) Correction of 38.321 on priority handling for bundling CG transmission ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1085 - F NR\_IIOT-Core

* [016] 2 CRs not pursued

IIoT other

[R2-2102763](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102763.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 - F NR\_IIOT-Core

* [016] Agreed in principle
* [AT113bis-e][017][NR16] MAC III (Ericsson)

Scope: Treat R2-2102777, R2-2103023, R2-2104104, R2-2103534, R2-2102764, R2-2103293, R2-2103447, R2-2103437, R2-2103438

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

NR-U other

[R2-2102777](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102777.zip) NDI Toggling Status Update for CG Retransmission Samsung CR Rel-16 38.321 16.4.0 1068 - F NR\_unlic-Core

* [017] Not Pursued

[R2-2103023](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103023.zip) Corrections to BSR/PHR content for NR-U ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1075 - F NR\_unlic-Core

* [017] Agreed in principle

[R2-2104104](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104104.zip) Clarification on HARQ status upon LBT failure LG Electronics UK, Ericsson discussion TEI16

* [017] Noted
* [017] RAN2 confirm that the HARQ process status remains in 'not pending' after LBT succeed once for a transmission of a TB on the HARQ process, even if LBT failure indication is received for a retransmission. No specification change needed.

2-Step RA

[R2-2103534](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103534.zip) Correction to RA-RNTI generation for 2-step RA Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1089 - F NR\_2step\_RACH-Core

* [017] Not Pursued

IAB

[R2-2102764](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102764.zip) Stop ongoing Random Access procedure due to pre-emptive BSR CATT CR Rel-16 38.321 16.4.0 1067 - F NR\_IAB-Core

* [017] Not Pursued

[R2-2103293](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103293.zip) CR for not transmitting only padding and padding BSR with eLCID Samsung CR Rel-16 38.321 16.4.0 1080 - F NR\_IAB-Core

* [017] RAN2 confirm that the issue described in R2-2103293 shall be fixed in Rel-16. The detailed wording can be discussed in the next meeting.
* [017] Postponed

eMIMO

[R2-2103447](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103447.zip) Discussion on SCell BFR regarding RS change ASUSTeK discussion Rel-16 38.321 NR\_eMIMO-Core

* [017] Noted, proposals not agreed, TP not agreed

Others

[R2-2103437](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103437.zip) Reconsideration on timer control when performing configured grant transmission ZTECorporation, Sanechips discussion Rel-16 NR\_IIOT-Core

* [017] Noted, proposals not agreed

[R2-2103438](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103438.zip) Correction to 38.321 on the timer control when performing the CG transmission ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1086 - F NR\_IIOT-Core

* [017] Not Pursued

Withdrawn

[R2-2104216](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104216.zip) IIOT/URLLC co-existence in Rel-16 LG Electronics UK discussion Rel-16 TEI16 Withdrawn

R2-2103366 Correction to PUSCH skipping with UCI for NR-U Nokia, Nokia Shanghai Bell discussion Rel-16 38.321 NR\_unlic-Core Withdrawn

* [AT113bis-e][018][NR16] RLC PDCP BAP (Nokia)

Scope: Treat R2-2102943, R2-2102630, R2-2102846, R2-2103590, R2-2104203, R2-2104165

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

#### 6.1.3.2 RLC

[R2-2102943](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102943.zip) RETX\_COUNT upon expiry of t-PollRetransmit Nokia, Nokia Shanghai Bell CR Rel-16 38.322 16.2.0 0040 - F NR\_newRAT-Core, TEI16

* [018] Not Pursued

#### 6.1.3.3 PDCP

[R2-2102630](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102630.zip) LS on synchronization of Ethernet Compression (R3-211128; contact: Nokia) RAN3 LS in Rel-16 NR\_IIOT-Core To:RAN2 Cc:-

* [018] Noted
* [018] Include in reply LS to RAN3 the following:

In case EHC headers would not be included in DL packets, EHC desynchronization cannot be handled by the UE. However, generally the EHC header should be always included in both UL and DL when EHC is configured for the UE.

In case EHC headers would be included in both UL and DL, desynchronization can in principle be handled by implementation. However, this may result to loss of packets in the beginning of the session as well as unnecessary EHC feedback transmissions in vain and unnecessary EHC overhead.

[R2-2102846](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102846.zip) Potential issues on synchronization of EHC Huawei, HiSilicon discussion NR\_IIOT-Core

* [018] Noted

[R2-2104203](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104203.zip) PDCP miscellaneous corrections LG Electronics Inc. (PDCP rapporteur) CR Rel-16 38.323 16.3.0 0070 - F NR\_IIOT-Core, 5G\_V2X\_NRSL-Core Late

* [018] Agreed in principle

[R2-2104619](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104619.zip) [DRAFT] Reply LS on synchronization of Ethernet Compression Nokia LS out

* [018] The LS is approved in R2-2104643

[R2-2103590](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103590.zip) Response to RAN3 LS on state synchronization of EHC ZTE Corporation, Sanechips discussion Rel-16 NR\_IIOT-Core

Not treated

#### 6.1.3.4 SDAP

#### 6.1.3.5 BAP

[R2-2104165](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104165.zip) Miscellaneous corrections on BAP transmitting operation and default routing Huawei, HiSilicon (Rapporteur) CR Rel-16 38.340 16.4.0 0015 - F NR\_IAB-Core

* [018] revised

R2-2104560 Miscellaneous corrections on BAP transmitting operation and default routing Huawei, HiSilicon (Rapporteur) CR Rel-16 38.340 16.4.0 0015 1 F NR\_IAB-Core

* [018] agreed in principe

[R2-2103935](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103935.zip) Handling of Unknown and Reserved Values in the BAP Header Ericsson, AT&T discussion NR\_IAB-Core

Treat On-Line only.

### 6.1.4 Control Plane corrections

#### 6.1.4.1 NR RRC

In case a correction need to mirrored for both NR RRC and LTE RRC, the corrections should be submitted under the same AI (i.e. the sub-AIs below this).

##### 6.1.4.1.1 Connection control

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

* [AT113bis-e][019][NR16] Connection Control (Fujitsu)

Scope: Treat R2-2103209, R2-2103210, R2-2104247, R2-2104240, R2-2103280, R2-2103449, R2-2102854, R2-2104167, R2-2103937

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

[R2-2104585](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104585.zip) Report of [Offline-019][NR16] Connection Control Fujitsu

* [019] Noted, conclusions taken into account and reflected below

**IIOT NR-U**

[R2-2103209](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103209.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 - F NR\_IIOT-Core, NR\_unlic-Core

* [019] Agreed in principle

[R2-2103210](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103210.zip) CR on the UE capability restriction on DCI format 0\_2/1\_2 for unlicensed band (Option 2) OPPO, Samsung, Xiaomi CR Rel-16 38.306 16.4.0 0548 - F NR\_IIOT-Core, NR\_unlic-Core

* [019] Not pursued

[R2-2104247](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104247.zip) Correction on releasing referenceTimePreferenceReporting and sl-AssistanceConfigNR Google Inc. CR Rel-16 38.331 16.4.1 2562 - F 5G\_V2X\_NRSL-Core, NR\_IIOT-Core

* [019] Agreed in principle

[R2-2104240](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104240.zip) Correction on description of subCarrierSpacing in BWP Fujitsu, Samsung CR Rel-16 38.331 16.4.1 2561 - F NR\_unlic-Core

* [019] revised

R2-2104604 Correction on description of subCarrierSpacing in BWP Fujitsu, Samsung CR Rel-16 38.331 16.4.1 2561 1 F NR\_unlic-Core

* [019] Agreed in principle

[R2-2103280](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103280.zip) Correction on description of ssb-PositionsInBurst in ServingCellConfigCommonSIB Fujitsu CR Rel-16 38.331 16.4.1 2505 - F NR\_unlic-Core

* [019] revised

[R2-2103280](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103280.zip) Correction on description of ssb-PositionsInBurst in ServingCellConfigCommonSIB Fujitsu CR Rel-16 38.331 16.4.1 2505 1 F NR\_unlic-Core

* [019] Agreed in principle

[R2-2103449](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103449.zip) Correction on freqMonitorLocations ASUSTeK CR Rel-16 38.331 16.4.1 2508 - F NR\_unlic-Core

* [019] Agreed in principle

**eMIMO**

[R2-2102854](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102854.zip) Correction on repetition for L1-SINR vivo draftCR Rel-16 38.331 16.4.1 F NR\_eMIMO-Core

* [019] Agreed in principle

**IAB**

[R2-2104167](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104167.zip) Miscellaenous corrections on BH RLC channel management for IAB-MT Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2557 - F NR\_IAB-Core

* [019] revised

R2-2104562 Miscellaenous corrections on BH RLC channel management for IAB-MT Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2557 1 F NR\_IAB-Core

* [019] Agreed in principle

[R2-2103937](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103937.zip) Clarification to BAP address field description in the BAP-RoutingID IE Ericsson CR Rel-16 38.331 16.4.1 2542 - F NR\_IAB-Core

Moved from 6.1.4.1.5

* [019] Not pursued

##### 6.1.4.1.2 RRM and Measurements

* [AT113bis-e][020][NR16] RRM and Measurments (Apple)

Scope: Treat R2-2102650, R2-2103030, R2-2103169, R2-2103879, R2-2103281, R2-2104173,

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

[R2-2104623](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104623.zip) Summary of [AT113bis-e][020][NR16] RRM and Measurements Apple

* [020] Noted, conclusion taken into account and reflected below

Autonomous gap

[R2-2102650](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102650.zip) LS on CGI reading with autonomous gaps (R4-2103610; contact: ZTE) RAN4 LS in Rel-16 NR\_RRM\_enh-Core To:RAN2 Cc:-

* [020] Noted

[R2-2103030](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103030.zip) Correction on T321 for autonomous gap based E-UTRAN CGI reporting ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2494 - F NR\_RRM\_enh-Core

* [020] Agreed in principle

NPN

[R2-2103169](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103169.zip) Clarification on NPN related CGI report Huawei, CMCC, China Telecom, China Unicom, HiSilicon CR Rel-16 38.331 16.4.1 2501 - F NG\_RAN\_PRN-Core

- [020] Rap: It’s suggested to have a further discussion on NPN related CGI reporting in the next RAN2 meeting by taking into account companies’ comments (including avoiding impacts to non-NPN-capable UEs, limiting the impacts to NPN-only cells with presence of npn-IdentityInfoList, etc.)

* [020] Postponed

NR-U

[R2-2103879](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103879.zip) Discussion on NR-U RRM measurement Apple, xiaomi, LG Electronics discussion Rel-16 NR\_unlic-Core

* [020] The text proposals in change 1 and 2 in Annex 2 in R2-2103879 are agreed
* [020] Noted

[R2-2103281](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103281.zip) Discussion on configuration of SSBs to be measured for NR-U Fujitsu discussion Rel-16 NR\_unlic-Core

* [020] noted
* [020] It is agreed to have the restriction to SSB-ToMeasure that only *mediumBitmap* is used for operation with shared spectrum.
* [020] The change of replacing “discovery transmission burst window” with “SMTC measurement” in SSB-ToMeasure is agreed.
* [020] Agree that the *ssb-ToMeasure* associates with *ssb-PositionQCL-Common-r16* (i.e., the k-th bit is set to 0 for k>ssb-PositionQCL-Common). The corresponding CR should take companies’ comment into account that “if configured” is not applicable to ssb-PositionQCL-Common since it’s a mandatory field.
* [020] If *ssb-ToMeasure* indicates a longer bitmap (10001000) while a smaller Nqcl (I.e.=4) is configured for *ssb-PositionQCL-CellsToAddModList-r16*, only the first Nqcl bits in *ssb-ToMeasure* are applicable.
* [020] Capture in chairman notes: that MN and SN always configure the same value on *ssb-PositionQCL-Common-r16/ ssb-PositionQCL-CellsToAddModList-r16* for the same carrier and/or cells.
* [020] Agree to make *ssb-PositionQCL-Common-r16* in *SIB24/MeasObjectNR* conditional mandatory for shared spectrum in LTE spec, to align with NR spec.
* [020] It’s suggested to have the same field description into LTE spec for SSB-ToMeasure as the final text achieved for NR
* [020] Send an LS to RAN1 to trigger the discussion there on random value generation when *rmtc-SubframeOffset* is not configured.

[R2-2104592](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104592.zip) Inter-RAT RRM measurement on NR-U Apple, Fujitsu, xiaomi, LG Electronics CR Rel-16 36.331 16.4.0 4648 - F NR\_unlic-Core, TEI16

* [020] Agreed in principle

[R2-2104593](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104593.zip) SSB-ToMeasure for NR-U Apple, Fujitsu, xiaomi, LG Electronics CR Rel-16 38.331 16.4.1 2575 - F NR\_unlic-Core, TEI16

* [020] Agreed in principle

[R2-2104594](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104594.zip) LS to RAN1 on random value generation for *RMTC-SubframeOffset* RAN2 LS out Rel-16 NR\_unlic-Core, TEI16 To: RAN1

* [020] Approved

IAB

[R2-2104173](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104173.zip) Missing smtc3 for smtc restriction with ssbFrequency Samsung R&D Institute UK CR Rel-16 38.331 16.4.1 2558 - F NR\_IAB-Core

* [020] Merged with Rapporteur CR

##### 6.1.4.1.3 System Information and Paging

* [AT113bis-e][021][NR16] Sys Info Inter Node and Misc (Ericsson)

Scope: Treat R2-2102714, R2-2103582, R2-2103661, R2-2103929, R2-2104205, R2-2103851, R2-2103645, R2-2103936,

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

Intended outcome: Report and Agreed-in-principle CRs

Deadline: Schedule A

SI

[R2-2102714](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102714.zip) Corrections to UE action upon SIB1 reception Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.0 2475 - F NR\_pos-Core, 5G\_V2X\_NRSL-Core

[R2-2104568](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104568.zip) Corrections to UE action upon SIB1 reception Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.0 2475 1 F NR\_pos-Core, 5G\_V2X\_NRSL-Core

* [021] agreed in principle

IIOT

[R2-2103582](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103582.zip) Discussion on leap second and DST for R16 accurate time ZTE Corporation, Sanechips discussion Rel-16 NR\_IIOT-Core

=> revised

R2-2104506 Discussion on leap second and DST for R16 accurate time ZTE Corporation, Sanechips discussion Rel-16 NR\_IIOT-Core

* [021] Noted, proposals not agreed

##### 6.1.4.1.4 Inter-Node RRC messages

[R2-2103661](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103661.zip) Introducing the UE config release in INM Ericsson discussion Rel-16 TEI16

* [021] Noted
* [021] The *ue-ConfigRelease* field is not introduced in NR.

[R2-2103929](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103929.zip) Correction on failureType in FailureReportSCG-EUTRA and scgFailureInfoEUTRA Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2540 - F NR\_newRAT-Core, NR\_unlic-Core

R2-2104543 Correction on failureType in FailureReportSCG-EUTRA and scgFailureInfoEUTRA Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2540 1 F NR\_newRAT-Core, NR\_unlic-Core

* [021] Agreed in principle

[R2-2104205](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104205.zip) Introduction of TDD Configuration Inter-node RRC Message CATT draftCR Rel-16 38.331 16.4.1 F NR\_SON\_MDT-Core Late

* [021] Not Pursued

[R2-2103851](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103851.zip) Correction on UTRA Capabilty forwarding in HO preparation Apple CR Rel-16 36.331 16.4.0 4626 - F SRVCC\_NR\_to\_UMTS-Core

Moved from 6.1.4.1.1

* [021] Not Pursued

##### 6.1.4.1.5 Other

[R2-2103645](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103645.zip) Miscellaneous non-controversial corrections Set IX Ericsson CR Rel-16 38.331 16.4.1 2519 - F NR\_newRAT-Core, TEI16

- [021] The RRC Rapporteur’s CR in [R2-2103645](https://urldefense.com/v3/__https:/protect2.fireeye.com/v1/url?k=78fd6e23-27665729-78fce56c-0cc47a31384a-66cfb85d85de0e16&q=1&e=5cc1516c-ccb7-43ae-a6f4-3c60ebdc031e&u=http*3A*2F*2Fwww.3gpp.org*2Fftp*2Ftsg_ran*2FWG2_RL2*2FTSGR2_113bis-e*2FDocs*2FR2-2103645.zip__;JSUlJSUlJSUl!!CTRNKA9wMg0ARbw!z67MEwSlNlzltFWnn4MhAs0N3o9g8TDuhZHJRj3VGOb1nT7kbJpG0PdSawFRoXcEg-8mkQ$) to be updated to include editorial changes collected in this and other agenda items.

* [021] revised, email approval
* [Post113bis-e][052][NR16] RRC Misc corrections (Ericsson)

Scope: The RRC Rapporteur’s CR in [R2-2103645](https://urldefense.com/v3/__https:/protect2.fireeye.com/v1/url?k=78fd6e23-27665729-78fce56c-0cc47a31384a-66cfb85d85de0e16&q=1&e=5cc1516c-ccb7-43ae-a6f4-3c60ebdc031e&u=http*3A*2F*2Fwww.3gpp.org*2Fftp*2Ftsg_ran*2FWG2_RL2*2FTSGR2_113bis-e*2FDocs*2FR2-2103645.zip__;JSUlJSUlJSUl!!CTRNKA9wMg0ARbw!z67MEwSlNlzltFWnn4MhAs0N3o9g8TDuhZHJRj3VGOb1nT7kbJpG0PdSawFRoXcEg-8mkQ$) to be updated to include changes collected in various agenda items

Intended outcome: Agreed in principle CR

Deadline: Short

[R2-2103936](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103936.zip) Correction to scgFailureInfoEUTRA and FailureReportSCG-EUTRA Ericsson CR Rel-16 38.331 16.4.1 2541 - F NR\_newRAT-Core

* [021] Not Pursued

TEI16 new and small enhancements

* [AT113bis-e][001][TEI16] TEI16 new and small (Chairman)

Scope: Treat R2-2103042, R2-2103043, R2-2103044, R2-2103045, R2-2102623, R2-2102624, R2-2103467, R2-2103464

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

Redirection with MPS indication:

- [001] Chair comment: It is objectively not clear-cut whether to allow to do this or not. My main line of thinking for P1 is a) the work is really minimal in R2 (it is following the pattern we established for voice fallback), b) there is several operator requests for this, so c) we can decide at Plenary.

* [001] ph1 For CRs in R2-2103042-45 aim to prepare technical endorsed CRs to RAN plenary, and decide at RP whether to do this at all, whether in R16/R17 and whether a WI is required, e.g. due to CT1 involvement.

[R2-2103042](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103042.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile, Ericsson, Qualcomm CR Rel-16 36.331 16.4.0 4579 2 C NR\_newRAT-Core, TEI16 R2-2102232

[R2-2103043](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103043.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile, Ericsson, Qualcomm CR Rel-16 38.331 16.4.1 2413 2 C NR\_newRAT-Core, TEI16 R2-2102233

[R2-2103044](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103044.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile, Ericsson, Qualcomm CR Rel-16 36.306 16.4.0 1804 1 C NR\_newRAT-Core, TEI16 R2-2102234

[R2-2103045](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103045.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile, Ericsson, Qualcomm CR Rel-16 38.306 16.4.0 0526 1 C NR\_newRAT-Core, TEI16 R2-2102235

- [001] There were a high number of detailed comments during the very last day. Proponent should take comments into account and provide revised CRs to the next meeting.

* [001] CRs above are postponed

[R2-2103623](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103623.zip) Clarification on the initiation of RNA update Huawei, HiSilicon discussion Rel-16 TEI16

* [001] Ph1: There is support for the changes in R2-2103623 (on a high level, details for further discussion).

R2-2104620 Clarification on the initiation of RNA update Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4651 - F LTE\_5GCN\_connect-Core

* [001] agreed in principle

R2-2104621 Clarification on the initiation of RNA update Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2581 - F NR\_newRAT-Core, TEI16

* [001] agreed in principle

[R2-2103624](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103624.zip) Clarification on RRC Release cause for inter-RAT cell (re)selection in RRC\_INACTIVE Huawei, HiSilicon discussion Rel-16 TEI16

* [001] Not Pursued

[R2-2103467](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103467.zip) On combined RRC procedures Nokia, Nokia Shanghai Bell, Ericsson discussion Rel-16 TEI16 R2-2101319

- [001] ph1 Rapp: Continue the discussion on R2-2103467 with the assumption that we’d agree later the release applicability for TS change, if any is agreeable.

a) Clarify whether multiple DL RRC messages in a TB is currently allowed, in particular for the two cases on the table in R2-2103467. If not, whether it is worthwhile to enable this. Note that this seems to have been intended for R15. Discuss whether a TS change is desirable to clarify the situation.

b) Check whether there is interest to allow relaxation of processing time, such that reply to first procedure can be sent after second procedure is finished.

- [001] ph2 Chair Comment: In addition to the obeservations below it was discussed also that the network may need to be careful to avoid ambiguities for e.g. L2 reconfigurations for SRB when multiple RRC messages are carried in one TB, and at earlier meeting it has been discussed that the network need to be careful when a RRC procedure may fail when multiple RRC messages are carried in one TB.

* [001] Observation 1: Sending Multiple DL RRC messages in a Transport Block (TB) is allowed in general, to initiate multiple procedures. From RRC point of view the received RRC messages are treated sequentially in order, independent of each other.
* [001] Observation 4: According to current specifications (RRC and L2), for a RRC procedure initiated by a DL RRC message, the UE will generate and transmit the UL RRC reply message as soon as possible.
* [001] There was no interest to capture any TS clarification

[R2-2103464](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103464.zip) RRC processing delays for combined procedures Nokia, Nokia Shanghai Bell, Ericsson CR Rel-16 38.331 16.4.1 1288 8 F TEI16 R2-2101320

* [001] Not Pursued
* [001] There will be no enhancement for combined RRC procedures for Rel-16

Withdrawn

R2-2103204 Conditional handover and UAI/SUI MediaTek Inc., Ericsson, Sharp, LG Electronics discussion Rel-16 Withdrawn

#### 6.1.4.2 LTE changes

* [AT113bis-e][022][NR16] IAB LTE Changes (Samsung)

Scope: Treat R2-2102800, R2-2103558, R2-2103598, R2-2103601, R2-2104166, R2-2104177, R2-2104178

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

IAB

[R2-2104166](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104166.zip) Miscellaneous corrections for TS 36.331 on F1 over LTE for IAB Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4633 - F NR\_IAB-Core

* [022] revised

R2-2104561 Miscellaneous corrections for TS 36.331 on F1 over LTE for IAB Huawei, HiSilicon, Samsung Electronics GmbH CR Rel-16 36.331 16.4.0 4633 1 F NR\_IAB-Core

* [022] Agreed in principle

[R2-2104597](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104597.zip) IAB LTE Changes Samsung Electronics GmbH CR Rel-16 36.331 16.4.0 4649 - F NR\_IAB-Core

* [022] Agreed in principle

[R2-2102800](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102800.zip) Clarification on DLInformationTransfer and ULInformationTransfer CATT CR Rel-16 36.331 16.4.0 4606 - F NR\_IAB-Core

* [022] Merged partially w R2-2104597

[R2-2103558](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103558.zip) Clarification on IP packet type in DedicatedInfoF1c Nokia, Nokia Shanghai Bell CR Rel-16 36.331 16.4.0 4616 - F NR\_IAB-Core

* [022] Merged partially w R2-2104597

[R2-2103598](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103598.zip) Transfer of F1C traffic over LTE leg in IAB - Option A Samsung Electronics GmbH CR Rel-16 36.331 16.4.0 4617 - F NR\_IAB-Core

* [022] Merged partially w R2-2104597

[R2-2103601](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103601.zip) Transfer of F1C traffic over LTE leg in IAB - Option B Samsung Electronics GmbH CR Rel-16 36.331 16.4.0 4618 - F NR\_IAB-Core

* [022] Not Pursued

[R2-2104177](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104177.zip) Correction on ULInformationTransfer failure handling for IAB in 36.331 [Opt A] Samsung R&D Institute UK CR Rel-16 36.331 16.4.0 4634 - F NR\_IAB-Core

* [022] Not Pursued

[R2-2104178](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104178.zip) Correction on ULInformationTransfer failure handling for IAB in 36.331 [Opt B] Samsung R&D Institute UK CR Rel-16 36.331 16.4.0 4635 - F NR\_IAB-Core

* [022] Merged partially w R2-2104597

#### 6.1.4.3 UE capabilities

* [AT113bis-e][023]NR16] UE caps (Intel)

Scope: Treat R2-2102868, R2-2103734, R2-2103764, R2-2102879, R2-2103137, R2-2103669,

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

[R2-2104555](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104555.zip) [AT113bis-e][023][NR16] Summary of UE Caps (Intel) intel

* [023] Noted, taken into account and reflected below

General

[R2-2102647](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102647.zip) LS on Rel-16 updated RAN4 UE features lists for LTE and NR (R4-2103368; contact: CMCC) RAN4 LS in Rel-16 To:RAN2 Cc:RAN1

Chair: Already taken into account, proposed Noted [000]

* [000] Noted

[R2-2102868](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102868.zip) Miscellaneous corrections to Rel-16 UE capabilities Intel Corporation CR Rel-16 38.306 16.4.0 0541 - F LTE\_NR\_DC\_CA\_enh

* [023] revised

[R2-2104553](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104553.zip) Miscellaneous corrections to Rel-16 UE capabilities Intel Corporation CR Rel-16 38.306 16.4.0 0541 1 F LTE\_NR\_DC\_CA\_en, NR\_unlic-Core, NR\_L1enh\_URLLC-Core, NR\_pos-Core, TEI16

* [023] agreed in principle

[R2-2103734](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103734.zip) UE Feature list for NR Rel-16 Intel Corporation CR Rel-16 38.822 15.0.1 0004 - B TEI16

* [023] revised

[R2-2104554](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104554.zip) UE Feature list for NR Rel-16 Intel Corporation CR Rel-16 38.822 15.0.1 0004 1 B TEI16

* [023] agreed in principle

NR-U

[R2-2103764](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103764.zip) Correction to Multi-PUSCH UL grant Ericsson CR Rel-16 38.306 16.4.0 0556 - F NR\_unlic-Core

- [023] ph1 Rappoteur: Agree to the changes in R2-2103764 which will be merged into the update of R2-2102868. The same editorial changes (i.e. adding ‘a’ between ‘to’ and ‘frequency’) will also be applied to the capability corresponding to R1 FG 10-8/11//20a.

* [023] Merged with CR in R2-2102868

URLLC

[R2-2102879](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102879.zip) Correction on Capability of two PUCCH transmission OPPO CR Rel-16 38.306 16.4.0 0542 - F NR\_L1enh\_URLLC-Core

* [023] revised, take into account R1 agreements

[R2-2104569](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104569.zip) Correction on Capability of two PUCCH transmission OPPO CR Rel-16 38.306 16.4.0 0542 1 F NR\_L1enh\_URLLC-Core

* [023] agreed in principle

IAB

[R2-2103137](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103137.zip) Correction on IAB in TS 38.306 ZTE, Sanechips CR Rel-16 38.306 16.4.0 0546 - F NR\_IAB-Core

* [023] Merged with CR in R2-2102868

eLCID

[R2-2103669](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103669.zip) Support of MAC subheaders with one-octet eLCID field Lenovo, Motorola Mobility discussion Rel-16 TEI16

- [023] Agree to go with Option 1 (i.e. introduce Conditionally mandatory for the UE(s) supporting the features that require the eLCID). This will be introduced into the update of R2-2102868.

* [023] Noted
* [023] Option 1 implemented by updated of CR in R2-2102868

Transparent TxD

[R2-2102646](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102646.zip) LS on Signalling scheme of Transparent TxD (R4-2103360; contact: vivo) RAN4 LS in Rel-16 TEI16 To:RAN2 Cc:RAN1, RAN5

Moved from 6.1.1

- vivo think R2 can start on R16, whil the R15 part may require some discussions

- ZTE agrees with vivos proposal to have R16 CRs with magic sentence. Thikn that R2 need to send LS.

- LG think this is about impl of PC2 wonder about the cap. Vivo think that R4 doesn't know whether we have a UE cap already or not.

* Noted

[R2-2103765](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103765.zip) Transparent TxD Capability and Signaling Ericsson discussion

Moved from 5.4.3

- Ericsson understands that there is a dependency to MIMO cap, and think R4 will discuss this tomorrow.

- Apple agrees with vivo that R2 CRs can be discussed, and think we can just refer to R4 TS.

- vivo think tha R4 is waiting for R2 feedback on whether rel indep is feasible or not.

* Noted
* Continue Offline, converge somewhat on CRs (collect comments, progress as far as possible), confirm wheher rel-independent is possible or not, send an LS.
* [AT113bis-e][030][NR16] Signalling scheme of Transparent TxD (vivo)

Scope: Converge on CRs (collect comments, progress as far as possible / reasonable), Confirm wheher rel-independent is possible or not, Make a Reply LS to R4.

Intended outcome: Report, Approved LS, CRs (preferably agreed in-pricniple)

Deadline: Report: Friday April 16, LS out and CRs: Monday April 19.

[R2-2104612](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104612.zip) Summary of offline discussion #030: Signalling scheme of Transparent TxD vivo

DISCUSSION

P2

- Ericsson think that anyway the CR need updates.

- Chair can skip P2, CR just baseline now.

P3/P4

- Nokia think we don’t need rel ind support.

- Huawei support early impl for R15. Think that PC2 restriction can be catured eiher in R2 or R4.

- Intel think R4 already discussed this. If R2 doesn’t specify Rel Ind R4 will do that in the R4 TS.

- vivo also support early impl from R15. Think that there will lkely not be a restriction for PC2. Think magic sentence work. Apple agrees and think that regarding applicability to PC2 we can indicate the R4 restrictions to their TS (as they are referred to in R2). Nokia agrees.

- QC think the R4 LS was clear, rel-indep for PC2, but R2 is now doing something else.

- Ericsson are not sure either whether to restrict to PC2 etc.

- Huawei think we need to decide if we can have the early impl.

- QC think we indeed can have the early impl but clarify that the early impl is only applicable to PC2.

- Ericsson think it is important that the IE that is signalled means the same thing in R15 and R16.

* RAN2 to capture RAN4 conclusion to introduce a new per-band capability signaling for FR1 UEs supporting transparent TxD in Rel-16.
* RAN2 can support Rel ind for R15, by early impl CR.
* It is possible to only apply the change for PC2 UEs for R15 (possibly this may mean signalling of two ind FFS).
* Short post email discussion on reply LS to R4
* [Post113bis-e][053][NR16] Reply LS on Signalling scheme of Transparent TxD (vivo)

Scope: Reply LS to RAN4

Intended outcome: Approved LS out

Deadline: Short

[R2-2104031](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104031.zip) Discussion on transparent TxD capability Huawei, HiSilicon discussion Rel-16 TEI16

[R2-2103187](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103187.zip) Discussion on RAN4 LS on signalling scheme of transparent TxD vivo discussion TEI16

[R2-2103312](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103312.zip) [Draft] Reply LS to RAN4 on the capability of transparent TxD vivo LS out Rel-16 To:RAN4 Cc:RAN1, RAN5

[R2-2103313](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103313.zip) CR on 38.306 for the capability of supporting txDiversity-r16 vivo draftCR Rel-16 38.306 16.4.0 TEI16

[R2-2103314](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103314.zip) CR on 38.331 for the capability of supporting txDiversity-r16 vivo draftCR Rel-16 38.331 16.4.1 TEI16

[R2-2103316](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103316.zip) CR on 38.331 for the release independent capability of txDiversity vivo draftCR Rel-16 38.331 16.4.1 TEI16

[R2-2103637](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103637.zip) UE capability for transmit diversity testing Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2514 - B TEI16

[R2-2103638](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103638.zip) UE capability for transmit diversity testing Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.4.0 0551 - B TEI16

Withdrawn

R2-2103315 CR on 38.306 for the release independent capability of txDiversity vivo draftCR Rel-15 38.306 15.13.0 TEI16 Withdrawn

#### 6.1.4.4 Idle/inactive mode procedures

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions, out of coverage, etc) are covered under RRC agenda items (5.4.1.x)

* [AT113bis-e][024]NR16] Idle Inactive (Huawei)

Scope: Treat R2-2102930, R2-2103168, R2-2102910

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

Intended outcome: Report and Agreed-in-principle CRs, if any

Deadline: Schedule A

[R2-2104521](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104521.zip) Discussion summary of [AT113bis-e][024][NR16] Idle Inactive Huawei

* [024] Noted, conclusions taken into account and reflected below

[R2-2102930](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102930.zip) Removal of duplicated statements related to IFRI handling LG Electronics France CR Rel-16 38.304 16.4.0 0205 - F NR\_newRAT-Core

- [024] Companies want to think about this. Current CR seems not agreeable.

* [024] not Agreed (for now)

[R2-2103168](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103168.zip) CR on the missing definition of Available SNPN in TS 38.304 Huawei, HiSilicon CR Rel-16 38.304 16.4.0 0206 - F NG\_RAN\_PRN-Core

* [024] Agreed in principle

[R2-2102910](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102910.zip) Discussion on RNA configuration for UE in SNPN AM Samsung Electronics Co., Ltd discussion Rel-16 NG\_RAN\_PRN-Core

* [024] Noted, proposal is agreeable

[R2-2104537](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104537.zip) Correction on RNA configuration for UE in SNPN access mode Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.1 2570 - F TEI16

* [024] Agreed in principle

## 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.

[R2-2102614](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102614.zip) Reply LS on per-table MCS range for mode-2 (R1-2102017; contact: OPPO) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2102615](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102615.zip) Reply LS on SL switching priority (R1-2102034; contact: Xiaomi) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN4 Cc:RAN2

[R2-2102622](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102622.zip) LS on maximum data rate for NR sidelink (R1-2102137; contact: Samsung) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2102624](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102624.zip) LS on SL HARQ-ACK reporting to the gNB (R1-2102176; contact: Ericsson) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2102880](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102880.zip) Correction on V2X UE capability OPPO CR Rel-16 38.306 16.4.0 0543 - F 5G\_V2X\_NRSL-Core

[R2-2104107](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104107.zip) Clarification on LTE DAPS and sidelink on 36.300 Huawei, HiSilicon CR Rel-16 36.300 16.5.0 1338 - F 5G\_V2X\_NRSL-Core

### 6.2.2 Control plane corrections

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

[R2-2102712](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102712.zip) Corrections to usage of CG Type 2 when T310 is running Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.0 2473 - F 5G\_V2X\_NRSL-Core

[R2-2102713](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102713.zip) Corrections to usage of exceptional pool during handover Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.0 2474 - F 5G\_V2X\_NRSL-Core

[R2-2102881](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102881.zip) Left issue on synchronization of PSSCH vs. PSFCH OPPO, Ericsson, Apple, Nokia, Nokia Shanghai Bell discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2102984](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102984.zip) Correction on sidleink configuration ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2491 - F 5G\_V2X\_NRSL-Core

[R2-2102985](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102985.zip) Correction on sidelink reset operation ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2492 - F 5G\_V2X\_NRSL-Core

[R2-2102986](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102986.zip) Discussion on sidelink reset operation ZTE Corporation, Sanechips discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2103090](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103090.zip) Miscellaneous Correction on TS38 331 CATT CR Rel-16 38.331 16.4.1 2498 - F 5G\_V2X\_NRSL-Core

[R2-2103127](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103127.zip) Miscellaneous corrections on NR V2X SHARP Corporation CR Rel-16 38.331 16.4.1 2499 - F 5G\_V2X\_NRSL-Core

[R2-2103172](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103172.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 - F 5G\_V2X\_NRSL-Core

[R2-2103317](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103317.zip) Corrections related to SA3 and RAN1 vivo CR Rel-16 38.331 16.4.1 2506 - F 5G\_V2X\_NRSL-Core

[R2-2103318](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103318.zip) CR on the inter-frequency sidelink operation vivo CR Rel-16 36.331 16.4.0 4614 - F 5G\_V2X\_NRSL-Core

[R2-2103500](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103500.zip) Correction of Sidelink Configured Grant Usage During Handover Nokia Germany CR Rel-16 38.331 16.4.1 2510 - F 5G\_V2X\_NRSL-Core

[R2-2103502](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103502.zip) Clarification of Sidelink Configured Grant Validity under Handover Failure Nokia Germany CR Rel-16 38.331 16.4.1 2511 - F 5G\_V2X\_NRSL-Core

[R2-2103767](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103767.zip) On the peer UE capability transfer in unicast sidelink Nokia, Nokia Shanghai Bell discussion Rel-16 5G\_V2X\_NRSL-Core R2-2101244

[R2-2104105](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104105.zip) Miscellaneous corrections on TS 38.331 (Rapporteur CR) Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2551 - F 5G\_V2X\_NRSL-Core

[R2-2104108](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104108.zip) Miscellaneous corrections on TS 36.331 (Rapporteur CR) Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4631 - F 5G\_V2X\_NRSL-Core

[R2-2104109](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104109.zip) Summary of [POST113-e][706][V2X] RRC impacts from the latest RAN1 decisions Huawei, HiSilicon report Rel-16 5G\_V2X\_NRSL-Core

[R2-2104110](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104110.zip) Correction on TS 38.331 from the latest RAN1 decisions Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2552 - F 5G\_V2X\_NRSL-Core

[R2-2104111](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104111.zip) Corrections on MCS selection Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1095 - F 5G\_V2X\_NRSL-Core

[R2-2104112](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104112.zip) Reply LS to RAN1 on SL HARQ-ACK reporting to the gNB Huawei, HiSilicon LS out Rel-16 5G\_V2X\_NRSL-Core To:RAN1

[R2-2104294](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104294.zip) Summary of CP corrections in AI 6.2.2 Huawei, HiSilicon discussion Rel-16 5G\_V2X\_NRSL-Core

### 6.2.3 User plane corrections

Including [POST113-e][705][V2X/SL], [POST113-e][707][V2X/SL] and [POST113-e][708][V2X/SL]. This agenda item may utilize a summary document on MAC (LG).

[R2-2102604](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102604.zip) Reply LS on the re-keying procedure and security indication for NR SL (C1-211228; contact: Nokia) CT1 LS in Rel-16 eV2XARC To:SA3, RAN3

[R2-2102668](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102668.zip) Reply LS on confirming the layer to provide security (S3-210738; contact: Huawei) SA3 LS in Rel-16 eV2XARC To:RAN2, CT1 Cc:-

[R2-2102722](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102722.zip) Summary of [POST113-e][707][V2X] Spec update to level 3 logical slots OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2102731](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102731.zip) 38321CR on correction of SL configured grant OPPO CR Rel-16 38.321 16.4.0 1065 - F 5G\_V2X\_NRSL-Core

[R2-2102732](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102732.zip) 38331 CR on correction of SL configured grant OPPO CR Rel-16 38.331 16.4.0 2477 - F 5G\_V2X\_NRSL-Core

[R2-2102748](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102748.zip) Discussion on Tx-resource (re)selection with HARQ feedback consideration OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2102812](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102812.zip) Clarification on sidelink process ID in SCI vivo discussion R2-2100792

[R2-2102813](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102813.zip) Alignment with RAN1 on TX resource (re-)selection vivo, ZTE discussion

[R2-2102814](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102814.zip) Draft LS to RAN1 on the minimum gap ensuring issue vivo LS out To:RAN1

[R2-2102882](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102882.zip) Left issue on PUCCH reporting OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2102883](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102883.zip) Correction on SL buffer flushing for sl-MaxTransNum OPPO CR Rel-16 38.321 16.4.0 1071 - F 5G\_V2X\_NRSL-Core

[R2-2102884](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102884.zip) Correction on sl-MaxTransNum configurable value OPPO CR Rel-16 38.331 16.4.1 2481 - F 5G\_V2X\_NRSL-Core

[R2-2102885](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102885.zip) Summary of [POST113-e][708] How to handle DG for retransmissions OPPO report Rel-16

[R2-2102983](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102983.zip) Correction on HARQ feedback of CSI report MAC CE ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1073 - F 5G\_V2X\_NRSL-Core

[R2-2102995](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102995.zip) Correction on TS 38.321 for mode 2 UE performing re-evaluation check OPPO CR Rel-16 38.321 16.4.0 1074 - F 5G\_V2X\_NRSL-Core

[R2-2102996](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102996.zip) How to handle dynamic grant for retransmissions Ericsson discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2102997](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102997.zip) Correction of PQFI terminology in SDAP – Alt. 1 Ericsson CR Rel-16 37.324 16.2.0 0020 - F 5G\_V2X\_NRSL-Core

[R2-2102998](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102998.zip) Correction of PQFI terminology in SDAP – Alt. 2 Ericsson CR Rel-16 37.324 16.2.0 0021 - F 5G\_V2X\_NRSL-Core

[R2-2102999](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102999.zip) Correction of PQFI terminology in RRC spec – Alt. 2 Ericsson CR Rel-16 38.331 16.4.1 2493 - F 5G\_V2X\_NRSL-Core

[R2-2103091](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103091.zip) Miscellaneous Correction on TS38 321 CATT CR Rel-16 38.321 16.4.0 1076 - F 5G\_V2X\_NRSL-Core

[R2-2103092](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103092.zip) TX Resource (Re)Selection with HARQ Feedback Consideration CATT discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2103117](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103117.zip) Correction on SL HARQ-ACK reporting on sidelink SHARP Corporation CR Rel-16 38.321 16.4.0 1077 - F 5G\_V2X\_NRSL-Core

[R2-2103282](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103282.zip) Correction on Buffer Size description of SL-BSR MAC CE Fujitsu CR Rel-16 38.321 16.4.0 1078 - F 5G\_V2X\_NRSL-Core

[R2-2103296](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103296.zip) CR for field descriptions of MAC subheader Samsung CR Rel-16 38.321 16.4.0 1081 - F 5G\_V2X\_NRSL-Core

[R2-2103379](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103379.zip) Corrections on UL/SL Prioritization Condition CATT CR Rel-16 38.321 16.4.0 1082 - F 5G\_V2X\_NRSL-Core

[R2-2103380](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103380.zip) Corrections on Resource Reservation for Mode2 CATT CR Rel-16 38.321 16.4.0 1083 - F 5G\_V2X\_NRSL-Core

[R2-2103850](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103850.zip) Correction on the usage of sl-ReselectAfter Apple CR Rel-16 38.321 16.4.0 1090 - F 5G\_V2X\_NRSL-Core

[R2-2104106](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104106.zip) Handling of the retransmission TB without an assocaited SL process Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1094 - F 5G\_V2X\_NRSL-Core

## 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).

[R2-2103922](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103922.zip) UE handling of Positioning Frequency Layer Ericsson CR Rel-16 38.305 16.4.0 0060 1 F NR\_pos-Core R2-2101385

[R2-2104018](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104018.zip) Summary of agenda item 6.3.1 - REL-16 NR Positioning Stage 2 Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_pos-Core Late

[R2-2104046](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104046.zip) Correction to NR stage2 spec for MO-LR Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0072 - F NR\_pos-Core

R2-2104047 Correction to LTE stage2 spec for MO-LR Huawei, HiSilicon CR Rel-16 36.305 16.2.0 0103 - F LCS\_LTE, TEI16 Withdrawn

[R2-2104048](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104048.zip) Correction to 5G support for NB-IOT positioning Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0069 1 F NR\_pos-Core R2-2101929

### 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).

[R2-2102924](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102924.zip) Corrections on the description of SRS-Config CATT CR Rel-16 38.331 16.4.1 2490 - F NR\_pos-Core

[R2-2103849](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103849.zip) Correction on the SI offset usage of posSI Scheduling Apple CR Rel-16 38.331 16.4.1 2539 - F NR\_pos-Core

[R2-2103919](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103919.zip) Same posSIB-Type in multiple SI messages Ericsson discussion

[R2-2103920](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103920.zip) Summary for RRC NR Positioning Ericsson discussion Late

[R2-2104175](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104175.zip) Correction on posSI-RequestConfig and posSI-RequestConfigSUL field description Samsung R&D Institute UK CR Rel-16 38.331 16.4.1 2559 - F NR\_pos-Core

### 6.3.3 LPP corrections

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

[R2-2102786](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102786.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

[R2-2102920](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102920.zip) Corrections on the field description of NR-AdditionalPathList and DL-PRS positioning frequency layer related parameters CATT CR Rel-16 37.355 16.4.0 0294 - F NR\_pos-Core

[R2-2102921](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102921.zip) Corrections on NR-Multi-RTT-RequestAssistanceData CATT CR Rel-16 37.355 16.4.0 0295 - F NR\_pos-Core

R2-2102922 Corrections on the need code of segmentationInfo within CommonIEsRequestLocationInformation and CommonIEsProvideAssistanceData CATT CR Rel-16 37.355 16.4.0 0296 - F NR\_pos-Core Late

[R2-2102987](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102987.zip) Considerations on missing need codes in LPP Lenovo, Motorola Mobility discussion Rel-16 NR\_pos-Core

[R2-2103129](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103129.zip) Summary of AI 6.3.3 LPP corrections CATT discussion Rel-16 37.355 NR\_pos-Core Late

[R2-2103921](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103921.zip) LPP Layer interaction with lower layers for Positioning Frequency layer and Measurement Gap Ericsson CR Rel-16 37.355 16.4.0 0288 2 F NR\_pos-Core R2-2102123

[R2-2103923](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103923.zip) Need of compact expirationTime Indication Ericsson discussion

[R2-2103924](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103924.zip) Correction of field description name Ericsson CR Rel-16 37.355 16.4.0 0299 - F NR\_pos-Core

[R2-2104049](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104049.zip) Correction to PRS configuration Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0300 - F NR\_pos-Core

[R2-2104050](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104050.zip) Correction to the uplink LPP message Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0301 - F NR\_pos-Core

[R2-2104051](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104051.zip) Correction to DL-PRS capability Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0302 - F NR\_pos-Core

[R2-2104052](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104052.zip) Correction on positioning error reporting Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0303 - F NR\_pos-Core

[R2-2104269](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104269.zip) Correction on the field description of additionPaths ZTE Corporation, Sanechips CR Rel-16 37.355 16.4.0 0304 - F NR\_pos-Core

### 6.3.4 MAC corrections

[R2-2102923](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102923.zip) Corrections on SP Positioning SRS Activation and Deactivation MAC CE CATT CR Rel-16 38.321 16.4.0 1072 - F NR\_pos-Core

## 6.4 NR and LTE mobility enhancements

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

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

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

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

Purely editorial corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

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

### 6.4.1 CHO/CPC Corrections

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

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

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

[R2-2103046](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103046.zip) Conditional evaluation upon fallback to source cell after DAPS handover Ericsson CR Rel-16 36.331 16.4.0 4613 - F LTE\_feMob-Core

[R2-2103047](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103047.zip) Conditional evaluation upon fallback to source cell after DAPS handover Ericsson CR Rel-16 38.331 16.4.1 2497 - F NR\_Mob\_enh-Core

[R2-2103114](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103114.zip) Discussion on Applicable Cases for Failure Recovery via CHO CATT discussion Rel-16 NR\_Mob\_enh-Core

[R2-2103331](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103331.zip) 38.331 CR: Revised inability to comply with conditional reconfiguration Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2507 - F NR\_Mob\_enh-Core

[R2-2103332](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103332.zip) Clarification on SCG configuration in CHO Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_Mob\_enh-Core

[R2-2104000](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104000.zip) Discussion on cross-SRB CPC reconfiguration Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2104001](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104001.zip) Discussion on the re-transmission of UL message after CHO execution Huawei, HiSilicon, China Telecom discussion Rel-16 NR\_Mob\_enh-Core, LTE\_feMob-Core

[R2-2104074](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104074.zip) Miscellaneous corrections to 37.340 on mobility enhancement ZTE Corporation (Rapporteur), Sanechips CR Rel-16 37.340 16.5.0 0262 - F NR\_Mob\_enh-Core

[R2-2104261](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104261.zip) Full configuration for CHO Google Inc. CR Rel-16 38.331 16.4.1 2565 - F NR\_Mob\_enh-Core

R2-2102875 CR on UE Information report for CHO (Option-1) OPPO CR Rel-16 38.331 16.4.1 2479 - F 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core

R2-2102876 CR on UE Information report for CHO (Option-1) OPPO CR Rel-16 36.331 16.4.0 4608 - F 5G\_V2X\_NRSL-Core, LTE\_feMob-Core

R2-2102877 CR on UE Information report for CHO (Option-2) OPPO CR Rel-16 38.331 16.4.1 2480 - F 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core

R2-2102878 CR on UE Information report for CHO (Option-2) OPPO CR Rel-16 36.331 16.4.0 4609 - F 5G\_V2X\_NRSL-Core, LTE\_feMob-Core

R2-2103204 Conditional handover and UAI/SUI MediaTek Inc., Ericsson, Sharp, LG Electronics discussion Rel-16 Withdrawn

R2-2103215 Conditional handover and UAI/SUI MediaTek Inc., Ericsson, Sharp, LG Electronics, Qualcomm Incorporated discussion Rel-16

### 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.

[R2-2102820](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102820.zip) Reconfiguration during DAPS HO Ericsson discussion Rel-16 R2-2100488

[R2-2102821](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102821.zip) Addition and release of DRBs in DAPS HO Command Ericsson CR Rel-16 36.331 16.4.0 4607 - F LTE\_feMob-Core

[R2-2102822](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102822.zip) Addition and release of DRBs in DAPS HO Command Ericsson CR Rel-16 38.331 16.4.0 2478 - F NR\_Mob\_enh-Core

[R2-2103291](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103291.zip) CR on LCP of the source MAC entity Samsung CR Rel-16 38.321 16.4.0 1079 - F NR\_Mob\_enh-Core

[R2-2103292](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103292.zip) CR on LCP of the source MAC entity Samsung CR Rel-16 36.321 16.4.0 1522 - F NR\_Mob\_enh-Core

[R2-2103333](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103333.zip) 38.300 CR: Transmissions to the source that continue upon DAPS UL switching Nokia, Nokia Shanghai Bell CR Rel-16 38.300 16.5.0 0353 - F NR\_Mob\_enh-Core

[R2-2103625](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103625.zip) Correction on RRC re-establishment for DAPS Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core, LTE\_feMob-Core

[R2-2103626](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103626.zip) Clarification on RLF detection of source Pcell Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core, LTE\_feMob-Core

[R2-2104072](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104072.zip) Handling of physicalCellGroupConfig in DAPS handover MediaTek Inc. CR Rel-16 38.331 16.4.1 2544 - F NR\_Mob\_enh-Core

[R2-2104075](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104075.zip) CR on T312 handling in DAPS HO ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4627 - F LTE\_feMob-Core

[R2-2104076](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104076.zip) CR on configuration release in DAPS HO ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4628 - F LTE\_feMob-Core

[R2-2104125](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104125.zip) Configuration for UDCEHC and DAPS LG Electronics Inc. CR Rel-16 36.331 16.4.0 4632 - F LTE\_feMob-Core

[R2-2104128](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104128.zip) Configuration for EHC and DAPS LG Electronics Inc. CR Rel-16 38.331 16.4.1 2554 - 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

### 6.5.1 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.

[R2-2103110](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103110.zip) Addition of early measurement in idle/inactive UE behavior description in 38.331 CATT CR Rel-16 38.331 16.4.1 2509 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103111](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103111.zip) Addition of early measurement in idle/inactive UE behavior description in 36.331 CATT CR Rel-16 36.331 16.4.0 4615 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103803](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103803.zip) Misc corrections for Rel-16 DCCA Ericsson CR Rel-16 38.331 16.4.1 2534 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103804](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103804.zip) Misc corrections for Rel-16 DCCA Ericsson CR Rel-16 36.331 16.4.0 4622 - 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 [Post113-e][224][DCCA] TCI state indication at direct SCell activation (MediaTek)

[R2-2102613](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102613.zip) Reply LS on TCI state indication at Direct SCell activation (R1-2102015; contact: MediaTek) RAN1 LS in Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN4, RAN2

[R2-2102648](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102648.zip) Further Reply LS on power control for NR-DC (R4-2103373; contact: vivo) RAN4 LS in Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN2, RAN1 Cc:-

[R2-2102874](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102874.zip) Correction on FR2 NR-DC power control parameter vivo, MediaTek Inc. draftCR Rel-16 38.331 16.4.1 F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103031](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103031.zip) CR on SCG release and suspend in EN-DC ZTE Corporation, Sanechips CR Rel-16 37.340 16.5.0 0257 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103270](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103270.zip) Set-up and release of T316 in procedures Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2503 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103271](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103271.zip) NR DC power control signaling Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2103272](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103272.zip) NR DC power control signaling Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2504 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103273](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103273.zip) NR DC Cell Grouping Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2103805](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103805.zip) Cell grouping for asynchronous NR-DC Ericsson discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2103806](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103806.zip) Correction on p-UE-FR2 and p-NR-FR2 for NR-DC power control Ericsson CR Rel-16 38.331 16.4.1 2535 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2103981](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103981.zip) T316 handling when the split SRB1 or SRB3 is released Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2104036](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104036.zip) Report of [Post113-e][224][DCCA] TCI state indication at direct SCell activation (MediaTek) MediaTek Inc. discussion LTE\_NR\_DC\_CA\_enh-Core

[R2-2104040](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104040.zip) Reply LS on TCI state indication at Direct SCell activation MediaTek Inc. LS out LTE\_NR\_DC\_CA\_enh-Core To:RAN4, RAN1

[R2-2104044](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104044.zip) Clarification on NR SCG configuration within RRC Resume MediaTek Inc. CR Rel-16 38.331 16.4.1 2543 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2104139](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104139.zip) Clarification on intra-FR2 NR-DC power control Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh

## 6.6 SON/MDT support for NR

(NR\_SON\_MDT-Core; leading WG: RAN3; REL-16; started: Jun 19; Completed June 20; WID: RP-191776).

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

Tdoc Limitation: 7 tdocs. See also tdoc limitation for Agenda Item 6

### 6.6.1 General and stage-2 corrections

Including incoming LSs, TS 37.320 corrections

[R2-2102632](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102632.zip) Reply LS on MDT Stage 2 and Stage 3 alignment (R3-211140; contact: Ericsson) RAN3 LS in Rel-16 eMDT\_UMTSLTE-Core To:SA5, RAN2 Cc:-

[R2-2102641](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102641.zip) Reply LS on limitation of Propagation of immediate MDT configuration in case of Xn inter-RAT HO (R3-211335; contact: ZTE) RAN3 LS in Rel-16 NR\_SON\_MDT To:SA5, RAN2 Cc:-

[R2-2102671](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102671.zip) Reply LS on propagation of user consent related information during Xn inter-PLMN handover (S3-211330; contact: Ericsson) SA3 LS in Rel-16 NR\_SON\_MDT-Core To:RAN3 Cc:RAN2, SA5

[R2-2102672](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102672.zip) Reply LS on the user consent for trace reporting (S3-211338; contact: Qualcomm) SA3 LS in Rel-16 NR\_SON\_MDT-Core To:RAN2, SA5 Cc:RAN3

[R2-2103073](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103073.zip) Handling of user contest for location reporting in SONMDT QUALCOMM Incorporated discussion

[R2-2103549](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103549.zip) Clarification on RAN measurements collection period Nokia, Nokia Shanghai Bell CR Rel-16 37.320 16.4.0 0105 - F NR\_SON\_MDT-Core

[R2-2103819](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103819.zip) [Draft] Reply LS on MDT Stage 2 and Stage 3 alignment Ericsson LS out Rel-16 NR\_SON\_MDT-Core To:RAN3 Cc:SA5

[R2-2104037](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104037.zip) Clarification on Average UE throughout measurement Samsung discussion NR\_SON\_MDT-Core

[R2-2104199](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104199.zip) Correction to 37320 on MDT context handling ZTE Corporation, Sanechips CR Rel-16 37.320 16.4.0 0106 - C NR\_SON\_MDT-Core

### 6.6.2 TS 38.314 corrections

[R2-2103821](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103821.zip) On corrections to packet loss rate measurements Ericsson CR Rel-16 38.314 16.3.0 0014 - F NR\_SON\_MDT-Core

### 6.6.3 RRC corrections

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

[R2-2102909](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102909.zip) Correction on periodic logging in any cell selection state Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.1 2488 - F NR\_SON\_MDT-Core

[R2-2102911](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102911.zip) Correction on RLF report content determination for EUTRA frequency measurements Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.1 2489 - F NR\_SON\_MDT-Core

[R2-2102912](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102912.zip) Correction on RLF report for re-connection Samsung Electronics Co., Ltd CR Rel-16 36.331 16.4.0 4610 - F NR\_SON\_MDT-Core

[R2-2103101](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103101.zip) Correction on Inter-RAT MRO in 38.331 CATT CR Rel-16 38.331 16.4.1 2500 - F NR\_SON\_MDT-Core

[R2-2103766](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103766.zip) Clarification on LocationInfo reporting for SON NTT DOCOMO, INC. CR Rel-16 36.331 16.4.0 4621 - F NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103812](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103812.zip) on ReconnectionCellId and timeUntilReconnection field Ericsson CR Rel-16 36.331 16.4.0 4623 - F NR\_SON\_MDT-Core

[R2-2103815](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103815.zip) On the lack of PLMN identity check in case of anyCellSelected state related logging Ericsson CR Rel-16 38.331 16.4.1 2536 - F NR\_SON\_MDT-Core

[R2-2103817](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103817.zip) On TimeUntilReconnection and ReconnectionCellID logging as part of RLF report Ericsson CR Rel-16 38.331 16.4.1 2537 - F NR\_SON\_MDT-Core

[R2-2103818](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103818.zip) On releasing WLAN-BT-Sensor configurations upon returning from inactive Ericsson CR Rel-16 38.331 16.4.1 2538 - F NR\_SON\_MDT-Core

[R2-2103820](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103820.zip) Report of email discussion [Post113-e][NR/R16 SON/MDT] Timestamp of event triggered MDT Ericsson discussion

[R2-2103822](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103822.zip) ReconnectCellID in multi PLMN scenarios Ericsson discussion

[R2-2103875](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103875.zip) Discussion on RLF reporting Apple, Ericsson, MediaTek Inc. discussion Rel-16 NR\_SON\_MDT-Core

[R2-2103876](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103876.zip) Clarification on RA reporting Apple draftCR Rel-16 38.331 16.4.1 F NR\_SON\_MDT-Core

[R2-2104002](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104002.zip) Discussion on the location reporting in inter-RAT measurement for immediate MDT Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2104003](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104003.zip) Discussion on the user consent for trace reporting Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2104198](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104198.zip) CR to 36331 on RLF report and logged MDT report ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4636 - 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

[R2-2102651](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102651.zip) LS on timing of neighbor cell RSS-based measurements (R4-2103657; contact: Qualcomm) RAN4 LS in Rel-16 LTE\_eMTC5-Core To:RAN1, RAN2 Cc:-

[R2-2102653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102653.zip) LS related to RSS based RSRQ for LTE-MTC (R4-2103728; contact: Huawei) RAN4 LS in Rel-16 LTE\_eMTC5-Core To:RAN2 Cc:RAN1

### 7.2.2 Connection to 5GC corrections

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

[R2-2103361](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103361.zip) Discussion on correction for paging DRX cycle determination ZTE Corporation, Sanechips discussion LTE\_eMTC5-Core Late

[R2-2104239](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104239.zip) draft LS to RAN3 to clarify paging DRX cycle ZTE Corporation, Sanechips LS out Rel-16 LTE\_eMTC5-Core To:RAN3 Late

[R2-2104246](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104246.zip) Correction on paging DRX cycle ZTE Corporation, Sanechips CR Rel-16 36.304 16.3.0 0825 - F LTE\_eMTC5-Core Late

### 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.

[R2-2103012](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103012.zip) Draft reply LS on timing of neighbor cell RSS-based measurements Qualcomm Incorporated LS out Rel-16 LTE\_eMTC5-Core To:RAN4, RAN1

[R2-2103013](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103013.zip) Whether to support RSRQ with RSS Qualcomm Incorporated discussion Rel-16 LTE\_eMTC5-Core

[R2-2103491](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103491.zip) RSRQ measurements when RSS is used Huawei, HiSilicon discussion Rel-16 LTE\_eMTC5-Core

[R2-2104182](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104182.zip) Consideration on LS related to RSS based RSRQ for eMTC ZTE Corporation, Sanechips discussion Rel-16 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.

### 7.3.4 Other NB-IoT Specific corrections

NB-IoT specific topics

## 7.4 LTE Other WIs

(LTE\_terr\_bcast-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_high\_speed\_enh2-Core; LTE TEI16 Non-positioning)

(Documents relating to Rel-16 LTE but for which there is no existing RAN WI/SI, e.g. LSs from CT/SA requesting RAN2 action)

Purely editorial corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

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

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

[R2-2102944](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102944.zip) RETX\_COUNT upon expiry of t-PollRetransmit Nokia, Nokia Shanghai Bell CR Rel-16 36.322 16.0.0 0146 - F LTE-L23, TEI16

[R2-2103546](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103546.zip) Report on [Post113-e][206][LTE] Clarification to Fallback band combination definition (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-16 TEI16

[R2-2103547](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103547.zip) Clarification to Fallback band combination definition Nokia, Nokia Shanghai Bell CR Rel-16 36.306 16.4.0 1782 3 F TEI16 R2-2100606 Late

## 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.

[R2-2104264](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104264.zip) Correction to LTE stage2 spec for MO-LR Huawei, HiSilicon CR Rel-16 36.305 16.2.0 0104 - F LCS\_LTE, TEI16

# 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.

Workplan

[R2-2103523](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103523.zip) Updated NR MBS workplan Huawei, CMCC, HiSilicon discussion Rel-17 NR\_MBS-Core

* Noted

LS in

[R2-2102666](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102666.zip) Reply LS on 5MBS progress and issues to address (S2-2102077; contact: Huawei) SA2 LS in Rel-17 FS\_5MBS, NR\_MBS-Core To:RAN2, RAN3 Cc:SA4

- Huawei think paging is the main question.

* Noted

[R2-2102635](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102635.zip) Reply LS on 5MBS progress and issues to address (R3-211296; contact: Huawei) RAN3 LS in Rel-17 FS\_5MBS, NR\_MBS-Core To:SA2, RAN2, SA4 Cc:-

- Question on RRC states, and group paging.

* Noted

[R2-2102670](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102670.zip) Reply LS on 5MBS progress and issues to address (S3-211313; contact: Huawei) SA3 LS in Rel-17 FS\_5MBS\_SEC To:RAN2 Cc:SA2, SA4, RAN3

* noted

Related to LS

Support of Multicast in Idle Inactive

[R2-2103775](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103775.zip) Multicast in Idle and Inactive Ericsson, MediaTek, FirstNet, CBN discussion Rel-17 NR\_MBS-Core R2-2101737

[R2-2103907](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103907.zip) Multicast session reception in RRC INACTIVE Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core

DISCUSSION on the two tdocs above

Chair wonder if we can agree Multicast reception is supported in inactive mode

- Samsung think that reception of configuration in Connected may be needed (which adds to the load), and think that BWP design need to be considered.

- QC think from DL resource issue this is ok, and think that UL can be disabled, and the rest is implementation issue. QC think that going to inactive based on radio condition doesn’t work due to ping pong, and think there are more issues, would prefer to keep only Multicast support in connected.

- LG partially support this, but think that BWP switching should not be required so only initial BWP can be used, and can be agreed only with that condition.

- CMCC think it can be acceptable, and think that RAN anyway has a context in RRC Inactive. Think that the multicast service may be interrupted at mobility. Details FFS.

- CATT support this but think delivery mode 1 shall not be used in non-connected modes, and think that if the UE need to return to connected for config, this is an issue. Think delivery mode 2 is more stuiable for receiption in Inactive

- Firstnet strongly supports the proposal.

- MTK support this, as this can help to provide the service to more users. MTK think that multicast session can be supported in Inactive by common freq resorce.

- OPPO think there are 3 issues: RRC inactive with part of bearer suspended, HARQ, will the HARQ be enabled or disabled, BWP – think there are differences for Idle and Connected UE, think we can have this in next release.

Indicative show of hands (multi-alternative)

Alt 1) Multicast only for Connected in R17 (support: 8 companies)

Alt 2) Multicast support in Inactive, where parts of the configuration for/bearers for Multicast in CONNECTED are reused (support: 15 companies) (not acceptable: CATT, Samsung, LGE, vivo Fujitsu)

Alt 3) Multicast support in Inactive, reusing the delivery mode 2 / the support for broadcast bearers. (support 15 companies) (not acceptable: Huawei, QC).

DISCUSSION

- Firstnet and ericsson think Alt1 is not the way to go.

- Nokia think we should prioritize what we already have agreed ie MCast in connected. Fujitsu think Alt2 can be deprioritzed.

- QC think we can prioritize alt 1, can do Alt2 if time.

* Chair: RAN2 will prioritize Active Multicast support in RRC Connected mode in Rel-17. If time permits Multicast support for RRC Inactive can be considered later (once connected mode Multicast solution, and Broadcast solution has become more mature).

[R2-2102838](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102838.zip) Discussion on SA2 LS and multicast session activation Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2102716](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102716.zip) Discussion on Multicast in Idle and Inactive Mode CATT, CBN discussion Rel-17 NR\_MBS-Core

[R2-2102938](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102938.zip) NR MBS operation in Idle/Inactive mode Samsung discussion

Less applicable.

Session activation

[R2-2103278](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103278.zip) MBS session activation and group paging Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

DISCUSSION

- NEC support.

- QC support and think it should be restricted to cells supporting MBS. Nokia agrees. QC think that for cells not supporting MBS legacy paging shall be used. LG agrees.

- Ericsson agrees with P1 but think that also non-supporting nodes need to be supported with group paging, where CN allocates a specific group TMSI (transparent to RAN non supporting MBS).

- CATT think MCCH can be used, and think this may have less impact. Vivo agrees with CATT. MTK agrees as well. Vivo think that otherwise the UE need to wake up at more occasions.

- Oppo think MSB session ID can be used in the paging message and think inmpact to legacy UEs shall be considered.

- Xiaomi think that MCCH is not always best.

- Samsung think that gropu paging can only notify for on one service, and think that power consumption may be an issue.

- CMCC think we should first discuss what ID we would use.

* There is Support to have group notification for multicast for MBS supporting nodes (e.g. paging)

Go offline to attempt to progress slightly more (Nokia).

* [AT113bis-e][031][MBS17] MBS session activation (Nokia)

Scope: Based on the agreement, on-line comments and submitted papers, Progress the topic of session activation and group paging/notification to reach agreements if possible, FFS points otherwise. Can also collect comments on notification for non-supporting nodes.

Intended outcome: Report, Agreements

Deadline: Report/Agreements Friday April 16

[R2-2104577](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104577.zip) [AT113bis-e][031][MBS17] MBS session activation Nokia

DISCUSSION

P1/P2

- xiaomi support P2, on P1 wonder about the intention. Think P1 can be up to configuration, and think paging DRX will not be used.

- vivo agrees that P1 can maybe not be agreed now, dep on mechanism.

- Lenovo think the group notification here is only for MCast activation. Support P1 and p2.

- Oppo support P2, don't think we need P1 now, CATT agrees,

- Chair: skip P1 for now.

P7

- Ericsson think it is clear that notification is needed also for non-supporting nodes, has proposed a solution that can be used for both. Suggest group 5G S-TMSI.

- Xiaomi doesn’t have a strong pref on Ericsson’s proposal, for Idle UEs think that the USD is the only source of information. R2 cannot decide alone on ID. Huawei think MBS session ID was mentioned in SA2 LS

- Huawei think that the notification scalability problem is not the same for supporting and non-supporting nodes. UEs supporting MBS should main be served by supporting nodes.

- CATT think we should follow SA2 and use MBS session ID, think that non-supporting nodes may have high load.

- CMCC think that for supporting nodes we can use SA2 proposal, think that non-supporting nodes can use TMGI info (if R17).

- ZTE agrees with Ericsson and notification will have impact to both supporting and non-supporting nodes.

- Nokia think that if there really is capacity issues for paging maybe enahncements are needed.

On the Suggested Replies to SA2

- Huawei support such Reply. Ericsson insist that R2 must state that scalability issue is the same for supporting and non-supporting nodes. QC think that non-supporting nodes requiremens just exist in some special cases.

- Proposal, on Ericsson request R2 considers that the scalability issue for notification may be the same for supporting and non-supporting nodes if the number of UEs is similar under supporting and non-supporting nodes. ZTE support.

- Fijitsu and MTK think this should not be replied. A number of comapneis think we should not focus on non-supporting nodes and only answer what SA2 asked,

* Support group notification for multicast for MBS supporting nodes
* For delivery mode 1 UE is not expected to monitor Group notification channel in RRC\_CONNECTED
* It is FFS whether RAN2 needs to handle PRACH capacity issues due to group notifications
* Use same group notification identity for both RRC\_IDLE and RRC\_INACTIVE states

**For the reply LS**

* For non-supporting nodes, using MBS session ID will not work as it would impact non-MBS nodes. Unicast paging would work.
* For supporting nodes, using MBS session ID is feasible.
* Short Post email discussion for LS reply.
* [Post113bis-e][054][MBS] Reply LS on 5MBS progress (Huawei)

Intended outcome: Approved LS out

Deadline: Short

[R2-2103905](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103905.zip) Discussion on group notification for multicast session activation Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2103728](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103728.zip) Discussion on SA2 Reply LS on 5G MBS CMCC discussion Rel-17 NR\_MBS-Core

[R2-2103179](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103179.zip) NR Multicast group paging aspects Qualcomm Inc discussion Rel-17 NR\_MBS-Core

[R2-2103118](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103118.zip) Considerations on the SA2 questions about session activation vivo discussion

[R2-2103729](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103729.zip) Draft reply LS on Group Paging CMCC LS out Rel-17 NR\_MBS-Core To:SA2 Cc:RAN3

[R2-2103906](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103906.zip) Reply LS on 5MBS progress and issues to address Huawei, HiSilicon LS out Rel-17 NR\_MBS-Core To:SA2, RAN3

General

[R2-2102896](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102896.zip) RRC state control for MBS reception OPPO discussion Rel-17 NR\_MBS-Core

[R2-2103472](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103472.zip) NR Broadcast deployment scenarios ZTE, Sanechips discussion Rel-17

[R2-2103471](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103471.zip) draft LS about deployment scenarios of NR Broadcast ZTE, Sanechips LS out Rel-17 To:SA2, RAN3

[R2-2103372](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103372.zip) Further consideration of control plane aspects for NR MBS Kyocera discussion Rel-17

[R2-2103507](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103507.zip) Discussion on two delivery modes for NR MBS CHENGDU TD TECH LTD. discussion Rel-17

Channels and Bearers architecture

[R2-2103515](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103515.zip) Architecture aspects for NR MBS Ericsson discussion Rel-17 NR\_MBS-Core

[R2-2103180](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103180.zip) NR Multicast and Broadcast Radio Bearer Architecture aspects Qualcomm Inc discussion Rel-17 NR\_MBS-Core R2-2100318

[R2-2103200](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103200.zip) Split MRB Protocol Architecture and Logical Channel Aggregation Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2103650](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103650.zip) Layer-2 for MBS Samsung discussion Rel-17

[R2-2104226](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104226.zip) Clarification on the PDCP-anchored MRB Xiaomi Communications discussion Rel-17 NR\_MBS-Core

[R2-2104227](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104227.zip) MBS impacts on PDCP Xiaomi Communications discussion Rel-17 NR\_MBS-Core

### 8.1.2 Connected mode UEs

#### 8.1.2.1 Reliability

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

Summary by LGE

[R2-2103963](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103963.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 discussion Rel-17 NR\_MBS-Core

DISCUSSION

- QC cannot accept the proposals as is now, and think several observations are wrong O1 O2 O3.

- FW Can also not accept all proposals. Think O1 and O2 are only related to UM and O3 and O4 are related to HO.

- Intel agrees with QC ad FW. O3 is not accurate and O8 O9 are not correct

- Huawei think we can ask for P2.

- FW object to P2.

- CATT think that P2 can be agreed by removing the word only.

- LG think we should discuss P3

* Noted
* For a given UE, if the MRB’s QoS requirements are not met via PTM, switching to PTP with RLC-AM shall be supported.

[R2-2104501](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104501.zip) Summary of A.I. 8.1.2.1 Reliability LG Electronics Inc. discussion Rel-17 NR\_MBS-Core

- LG think majority of companies support P3 in the above

* Noted

[R2-2103188](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103188.zip) NR Multicast PTM bearer RLC AM mode operation Qualcomm Inc, FirstNet,UIC, Kyocera, AT&T discussion Rel-17 NR\_MBS-Core R2-2100319

[R2-2102717](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102717.zip) Reliability Improvement for PTM Transmission CATT discussion Rel-17 NR\_MBS-Core

[R2-2102782](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102782.zip) MBS UP architecture MediaTek Inc. discussion Rel-17

[R2-2102945](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102945.zip) MBS Reliability Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

[R2-2103201](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103201.zip) ARQ of PTM with Logical Channel Aggregation Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2103267](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103267.zip) HARQ modelling for supporting retransmission in MBS Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103374](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103374.zip) Consideration of possible solutions for L2 reliability in NR MBS Kyocera discussion Rel-17

[R2-2103413](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103413.zip) Issues on MBS reliability Lenovo, Motorola Mobility discussion Rel-17

[R2-2103450](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103450.zip) UE stay in RRC\_CONNECTED when no MBS data ongoing ASUSTeK discussion Rel-17 NR\_MBS-Core

[R2-2103473](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103473.zip) Consideration on MBS reliability guarantee ZTE, Sanechips discussion Rel-17

[R2-2103508](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103508.zip) Further discussion on reliability for RRC\_CONNECTED state CHENGDU TD TECH LTD. discussion Rel-17

[R2-2103516](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103516.zip) Reliability and Dynamic Switch for MBS Ericsson discussion Rel-17 NR\_MBS-Core R2-2101172

[R2-2103871](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103871.zip) Consideration on the MBS transmission reliability Apple discussion Rel-17 NR\_MBS-Core

[R2-2103949](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103949.zip) PTM Reliability Considerations Convida Wireless discussion Rel-17

[R2-2104088](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104088.zip) Support of PDCP status reporting for PTM-PTP switching SHARP Corporation discussion Rel-17 NR\_MBS-Core

[R2-2104150](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104150.zip) Comparison of L2 Reliability Solutions for MRB with dynamic PTM/PTP Switch Futurewei, Qualcomm Inc, Intel discussion Rel-17 NR\_MBS-Core

[R2-2104161](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104161.zip) Discussion on reliability improvement and UL feedback in NR multicast LG Electronics Inc. discussion Rel-17 NR\_MBS-Core

Withdrawn

[R2-2103679](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103679.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 discussion Rel-17 NR\_MBS-Core Withdrawn

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

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

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

[R2-2103518](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103518.zip) Email discussion report [Post113-e][054]PTP/PTM dynamic switch and MRB type change Ericsson (Rapporteur) report Rel-17 NR\_MBS-Core

DISCUSSION

P1

- Xiaomi think we discussed several types of split were discussed. Which types are intended here? Ericsson think that all bearer types with separate PDCP entity would use RRC instead. Xiaomi wonder about MAC. Ericsson think that use of > MAC entity hasn’t really been agreed yet so. Xiaomi think that two MAC entities can also be supported but without switching.

- ZTE think one piece is missing in P1. Think dynamic switch case should also be supported for MRB (split) and MRB (non-split). Ericsson think there was very little support for anything beyond P1. Can delete the “only”.

- QC think we sholdn’t mix split bearer with different AM/UM modes. Chair think this is indeed the case.

- Huawei Lenovo, MTK LG Samsung agrees

P2

- LG are negative to this, why separate PDCP entities, a change is the same PDCP entity?

- ZTE think this is for mobility, but think separate PDPC entities shall not be used and object to this.

- CATT think this is the basic mechanim for PTM PTP switch

- Chair: lot of comments, let skip this FFS for now.

P4

- ZTE think it is companies consensus that the network need some link info, this was agreed in R3. ZTE think that HARQ feedback can be disabled, but ZTE think that for HARQ there is the-NACK-only option, where the problematic UE is not identified. This can be addressed by UP e.g. PDCP status report, or by CP. ZTE object to P4 as there is no way now to monitor.

- Huawei think NACK-only HARQ wasn’t agree.

- A number of companies support: HW, CATT, LGE, Intel, Samsung, Lenovo, vivo, Mtk,

- Oppo think there are other optinon. Ericsson think that the PDCP Status report triggering for high reliability cases is still TBD and there was very little support for other case.

- NEC think that a scenario where the UE moved to cell edge is a justification for new UE signalling to request switch, for UEs in RRC INACTIVE

P5

- Chair wonder if this is about UP request or just configuration of PDCP SR.

- Ericsson explains that there was desire to have a lossless switch, but not clear exactly which configuration / arch this referred to. This was for switching at Handover.

- FW think we don’t need this at all for UM + UM case.

- Nokia wonder what trigger we would use. Would we introduce polling? Ericsson think this could be a request at Handover. Nokia think that then this is not really a dynamic switch, but instead a reconfiguration. Huawei think this is for avoiding bulk data loss at swtich, and it can be FFS what is the trigger.

- Nokia think the switch can be just a scheduling decision, so the UE doen’t know that this is a “switch”.

- Chair think that with this discussion at most we can capture an dFFS, e,g. FFS whether for avoiding losses at PTM to PTP dynamic switch (e.g. bulk losses) also e.g. for UM+UM case, PDCP status report may be used and whether it would then be requested by gNB.

Ericsson think we can skip it.

P6

- ZTE think the non –split case is more important.

- CATT think this is not the default configuration, not both legs are active at the same time

- ZTE cannot agree to any of this, as dynamic switch is not defined, think that for the following case P6 is not applicable (not clear)

- IDT think that P6 is about operation and not switching.

- QC think that we can also activate/deactive each leg as a way of operation.

- For P6, it seems we cannot reach consensus, as there seems to be several options on the table.

- Chair: Think the main point of P6 is that a number of companies indeed think that PTM PTP switching is a scheduling decision by gNB (or related to scheduling). Not clear to what extent there would be activation/deactivation which seems like a controversial point. Not clear whether power saving options are required (e.g. activation/deactivation or other?) Other controversial points of P6 seems less relevant, e.g. the mentioning of established unicast bearer in point 1,

Agreements

Chair: NOTE that the below agreements are only based on architecture decisions so far. The reliability discussion not concluded yet i.e. other cases than RLC UM + RLC UM. PTM PTP switch for such other cases is FFS

* Dynamic PTM/PTP switch is supported for a split MRB bearer (type) with a common (single) PDCP entity.
* As a baseline, no new UE based signalling is introduced to support gNB switch decision (e.g. PDCP SR for high reliability is still TBD)

Offline on P6/P7, to either reach agreement or reach agreement on which options to be on the table. (Note that in order to progress, we might need to discuss also R1 aspects, if such R1 aspects are found we can capture FFS for now, no LS now).

* [AT113bis-e][036][MBS17] PTM PTP operation switching (Ericsson)

Scope: Based on R2-2103518 and related on-line discussion, offline on P6/P7, focus on the main aspects, determine the options on the table (with significant support) with brief justifications (the issue(s) that an option is expected to address) and converge if possible. If R1 aspects e.g. DCI impacts need to be captured we can capture FFS for now, no LS now.

Intended outcome: Report.

Deadline: In time for CB Tuesday April 20

[R2-2104588](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104588.zip) Report of email discussion [AT113bis-e][036][MBS17] PTM PTP operation switching Ericsson

* Assuming a split-MRB (as agreed during the online session) configured with a PTM leg and PTP leg, the usage of the PTP leg cannot be deactivated (i.e. the UE needs to always monitor C-RNTI) after the necessary split-MRB configuration.
* Assuming a split-MRB (as agreed during the online session) configured with a PTM leg and PTP leg, it is FFS whether the usage of the PTM leg of the split-MRB may be subject to activation or deactivation and the details of such.

[R2-2102718](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102718.zip) Dynamic PTM/PTP Switch CATT discussion Rel-17 NR\_MBS-Core

[R2-2102767](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102767.zip) Discussion on dynamic PTM and PTP switching Shanghai Jiao Tong University discussion

[R2-2102783](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102783.zip) Dynamic Switch for NR MBS MediaTek Inc. discussion Rel-17

[R2-2103119](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103119.zip) Dynamic PTM PTP switch for RRC Connected UE vivo discussion

[R2-2103163](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103163.zip) PTP\_PTM dynamic switch NEC discussion Rel-17 NR\_MBS-Core

[R2-2103202](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103202.zip) Service Continuity during Dynamic PTM/PTP Switch with Logical Channel Aggregation Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2103255](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103255.zip) Discussion on dynamic PTM PTP switching Spreadtrum Communications discussion Rel-17 NR\_MBS-Core

[R2-2103358](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103358.zip) Dynamic PTM PTP switching LG Electronics Inc. discussion NR\_MBS-Core

[R2-2103373](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103373.zip) Consideration of dynamic PTM - PTP switching with service continuity for NR MBS Kyocera discussion Rel-17

[R2-2103414](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103414.zip) MBS dynamic switch between PTP and PTM with service continuity Lenovo, Motorola Mobility discussion Rel-17

[R2-2103474](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103474.zip) Mode switching signaling of NR MBS ZTE, Sanechips discussion Rel-17

[R2-2103512](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103512.zip) Procedure for dynamic PTM/PTP switch CHENGDU TD TECH LTD. discussion Rel-17

[R2-2103524](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103524.zip) PTP/PTM dynamic switch and MRB initialization Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2103543](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103543.zip) MRB and DRB configuration Sony Europe B.V. discussion Rel-17 NR\_MBS-Core

[R2-2103649](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103649.zip) Discussion on MRB Samsung discussion Rel-17

[R2-2103680](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103680.zip) PTM/PTP mode switching InterDigital discussion Rel-17 NR\_MBS-Core

[R2-2103872](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103872.zip) MBS PTP/PTM switching Apple discussion Rel-17 NR\_MBS-Core

[R2-2104118](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104118.zip) Dynamic switch between PTM and PTP for service continuity Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2104207](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104207.zip) Support of dynamic switch between PTP and PTM SHARP Corporation discussion

#### 8.1.2.3 Mobility and Service continuity

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

#### 8.1.2.4 Other

Including e.g. RAN2 aspects of group scheduling. AI Summary by vivo (wasn’t treated last meeting)

[R2-2103120](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103120.zip) Updated summary for MBS Group Scheduling vivo discussion

=> Revised in R2-2104494

R2-2104494 Updated summary for MBS Group Scheduling vivo discussion Rel-17 NR\_MBS-Core

[R2-2102719](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102719.zip) Discussion on Group Scheduling CATT discussion Rel-17 NR\_MBS-Core

[R2-2102765](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102765.zip) Discussion on deactivation of MBS reception Shanghai Jiao Tong University discussion Rel-17

[R2-2102766](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102766.zip) Consideration on Group Scheduling for NR MBS Shanghai Jiao Tong University discussion

[R2-2102784](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102784.zip) RAN2 aspects of Group Scheduling for NR MBS MediaTek Inc. discussion Rel-17

[R2-2102785](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102785.zip) L1 HARQ operation for PTM transmission MediaTek Inc. discussion Rel-17

[R2-2102839](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102839.zip) MBS MAC Layer and Group Scheduling Aspects Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2102895](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102895.zip) Discussion on group based scheduling for MBS OPPO discussion Rel-17 NR\_MBS-Core

[R2-2102934](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102934.zip) On Group Scheduling and Multiplexing Aspects Samsung discussion

[R2-2102937](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102937.zip) On MBS DRX, Data-Inactivity & BWP aspects Samsung discussion

[R2-2102946](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102946.zip) Miscellaneous Aspects of MBS Provisioning Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core Late

[R2-2103121](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103121.zip) Group Scheduling for MBS vivo discussion

[R2-2103254](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103254.zip) Discussion on MBS session activation/deactivation and UAC Spreadtrum Communications discussion Rel-17 NR\_MBS-Core

[R2-2103359](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103359.zip) MBS configuration for RRC\_CONNECTED LG Electronics Inc. discussion NR\_MBS-Core

[R2-2103416](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103416.zip) MBS Group Scheduling Aspects Lenovo, Motorola Mobility discussion Rel-17

[R2-2103475](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103475.zip) Discussion on Group scheduling for NR MBS ZTE, Sanechips discussion Rel-17

[R2-2103517](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103517.zip) Aspects of Group Scheduling Ericsson discussion Rel-17 NR\_MBS-Core

[R2-2103525](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103525.zip) RAN2 aspects of group scheduling Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2103703](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103703.zip) Discussion on group scheduling for MBS CMCC discussion Rel-17 NR\_MBS-Core

[R2-2103873](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103873.zip) MBS reception in CONNECTED state Apple discussion Rel-17 NR\_MBS-Core

[R2-2104162](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104162.zip) Discussion on RAN2 aspects of group scheduling LG Electronics Inc. discussion Rel-17 NR\_MBS-Core

[R2-2104228](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104228.zip) Discussion on group scheduling Xiaomi Communications discussion Rel-17 NR\_MBS-Core

### 8.1.3 Idle and Inactive mode UEs

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

MCCH

[R2-2103909](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103909.zip) Report of e-mail discussion: [Post113-e][053][MBS17] MCCH scheduling and MCCH change notification (Huawei) Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core

DISCUSSION

P1/P2

- OPPO don’t want P1, think period is ok, but think there will be beam sweeping, Huawei wonder if the duration is the concern. Huawei think the wondow is just to give the network some flexibility, think it doesn’t exclude beam-sweeping. OPPO think PDCCH occasion will be used instead.

- vivo agrees with P1/P2

P3

- Ericsson wonders whether we need separate RNTi for diff cases. Huawei think this is not yet clear.

P5/6a/6b

- Xiaomi think 6a/6b need to be decided by R1, as this could imapact the capacity of searchspace zero. Huawei confirm that this need ot be decided byu R1 (as stated in the proposals)

- Oppo also think the mapping pattern cold be based on paging. Huawei think this was the majorty view and MCCH is more like BCCH than paging.

- vivo think we should just confirm these proposals as it is based on legacy and just ask R1 for feasibility.

- CMCC think we should inform R1 on MCCH and MTCH. Ericsson agrees.

- Samsung tink 6a and 6b are not needed. R1 will handle these anyway. Samsung think we need to tell R1 about MCCH as they are not yet.

- LG would like to keep 6a 6b

General

- Ericsson would like to understand how multiple parallel services is supported.

* The MCCH transmission window is defined by MCCH repetition period, MCCH window duration and radio frame/slot offset.
* New RNTI is defined for scheduling MCCH.
* The concept of MCCH transmission window, similar to the one used for LTE SC-PTM, is used for NR MCCH scheduling. The exact parameters to define the window are FFS (discussed in the following proposals).
* Common search space is needed for MCCH scheduling. RAN2 should request RAN1 to discuss the details of CSS for MCCH.
* R2 assumes PDCCH occasions for MCCH search space are associated with SSBs in a pre-defined manner so that the UE can receive MCCH scheduling on PDCCH occasions according to its detected SSB.
* R2 assumes, In case searchSpace#0 is configured for MCCH (if allowed, pending RAN1 decision), the mapping between PDCCH occasions and SSBs is the same as for SIB1.
* R2 assumes that If common search space other than searchSpace#0 is configured for MCCH (if allowed, pending RAN1 decision), the PDCCH monitoring occasions for MCCH message which are not overlapping with UL symbols are sequentially numbered from one in the MCCH transmission window and mapped to SSBs using the similar rule as defined for OSI in TS 38.331.

Progress off-line the rest of the proposals, and LS to RAN1 (taking into account the comments)

* [AT113bis-e][032][MBS17] MCCH scheduling and Change notification (Huawei)

Scope: Progress remaninig proposals from R2-2103909 to reach agreements and FFS points. Make an LS to RAN1 based on agreements and provided comments (e.g. consider whether some info on MTCH need to be provided).

Intended outcome: Report, Agreements, Approved LS out.

Deadline: Report/Agreements Friday April 16, LS out Monday April 19 1800 UTC

[R2-2104629](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104629.zip) Report of offline discussion: [AT113bis-e][032][MBS17] MCCH scheduling and Change notification Huawei

DISCUSSION

P10

- ZTE think we shold capture FFS

- TD tech think there can be several groups with different rep/modification period etc. think that one group can map to one service type. Chair think that we may go into such details at later meeting.

P11

- LG think we only need the second option, but are ok with having both on the table for the teim being.

- LG think we can add also start. Hw think it is already agreed that start will use DCI

* Request RAN1 to discuss the details of the configuration of the bandwidth for MCCH reception.
* The modification period is defined for NR MCCH and NR MCCH contents are only allowed to be modified at each modification period boundary.
* The updated MCCH message should be sent in the same MCCH modification period where the change notification is sent.
* UE in RRC IDLE/INACTIVE should be able to monitor/read both MCCH channel and SI/Paging without BWP switch. It is up to RAN1 to decide how this is ensured.
* It is up to RAN1 to to decide about the RNTI and DCI format used for MCCH change notifications.
* FFS whether to support multiple MCCH, e.g. to support different service types.
* RAN2 will discuss and down-select from the following two options for the UE to get aware of session stop/modification:

Reading MCCH once per each MCCH modification period when receiving an ongoing broadcast session

DCI used for MCCH notification indicates the change of an ongoing broadcast session

[R2-2104630](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104630.zip) [DRAFT] LS on broadcast session delivery and MCCH design Huawei

- Huawei think the agreements bullets in the box may need to be slightly revised acc to above, so they are exactly reflected.

* With the revision above, the LS is approved in R2-2104639

[R2-2103705](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103705.zip) Discussion on delivery mode 2 transmission CMCC discussion Rel-17 NR\_MBS-Core

[R2-2103706](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103706.zip) LS on delivery mode 2 transmission CMCC LS out Rel-17 NR\_MBS-Core To:RAN1

[R2-2104229](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104229.zip) Remaining issues of MCCH and MCCH change notification Xiaomi Communications discussion Rel-17 NR\_MBS-Core

Delivery Mode 2 General

[R2-2102720](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102720.zip) Further Discussion on Delivery Mode 2 CATT, CBN discussion Rel-17 NR\_MBS-Core

[R2-2102893](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102893.zip) Discussion on beam sweeping transmission for delivery mode 2 OPPO discussion Rel-17 NR\_MBS-Core

[R2-2103167](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103167.zip) Discussion on Beam Sweeping Configuration for Flexible MBS Control Plane Scheduling TCL Communication Ltd. discussion Rel-17

[R2-2103277](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103277.zip) MBS Idle Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

[R2-2103776](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103776.zip) Open issues for UEs in idle or inactive mode Ericsson discussion Rel-17 NR\_MBS-Core

[R2-2103360](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103360.zip) MBS in IDLEINACTIVE LG Electronics Inc. discussion NR\_MBS-Core

[R2-2103415](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103415.zip) Discussion on MBS delivery modes Lenovo, Motorola Mobility discussion Rel-17

[R2-2103476](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103476.zip) Idle and Inactive mode UEs support of NR MBS ZTE, Sanechips discussion Rel-17

[R2-2103513](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103513.zip) Further discussion on delivery mode 2 for NR MBS CHENGDU TD TECH LTD. discussion Rel-17

[R2-2103670](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103670.zip) Considerations on measurements for NR MBS in idle/inactive Lenovo, Motorola Mobility discussion Rel-17 NR\_MBS-Core

[R2-2103704](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103704.zip) Discussion on delivery mode 2 remaining issues CMCC discussion Rel-17 NR\_MBS-Core

[R2-2103874](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103874.zip) MBS reception in IDLE/INACTIVE state Apple discussion Rel-17 NR\_MBS-Core

[R2-2103947](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103947.zip) NR MBS Configuration Information Convida Wireless discussion Rel-17

[R2-2104119](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104119.zip) MBS support for delivery mode 2 Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2103946](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103946.zip) On NR multicast and broadcast for RRC\_IDLE/RRC\_INACTIVE UEs Convida Wireless discussion Rel-17 R2-2101606

[R2-2104089](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104089.zip) L2 architecture for delivery mode 2 SHARP Corporation discussion Rel-17 NR\_MBS-Core R2-2101903

[R2-2104284](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104284.zip) Performance improvement for delivery mode 2 CHENGDU TD TECH LTD. discussion Rel-17

[R2-2103256](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103256.zip) Discussion issues on delivery mode2 Spreadtrum Communications discussion Rel-17 NR\_MBS-Core

Delivery Mode 2 Service Continuity

[R2-2104230](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104230.zip) Service continuity for delivery mode 2 Xiaomi Communications discussion Rel-17 NR\_MBS-Core

[R2-2103908](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103908.zip) Service continuity aspects of delivery mode 2 Huawei, HiSilicon, CBN discussion Rel-17 NR\_MBS-Core

[R2-2102894](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102894.zip) Discussion on MBS interesting indication and service continuity for delivery mode 2 OPPO discussion Rel-17 NR\_MBS-Core

Stage-3’ish

[R2-2103152](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103152.zip) Configuration and scheduling in MBS delivery mode 2 Futurewei discussion Rel-17 NR\_MBS-Core

Other

[R2-2103122](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103122.zip) MBS in Idle and Inactive Mode vivo discussion

[R2-2103178](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103178.zip) NR MBS control signalling aspects for UEs in different RRC states Qualcomm Inc discussion Rel-17 NR\_MBS-Core R2-2100320

## 8.2 MR DC/CA further enhancements

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

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 threads

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

### 8.2.1 Organizational, Requirements and Scope

Including LSs and any rapporteur inputs (which do not count against Tdoc limits).

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

[R2-2102642](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102642.zip) Reply LS on Conditional PSCell Addition/Change agreements (R3-211338; contact: Huawei) RAN3 LS in Rel-17 LTE\_NR\_DC\_enh2-Core To:RAN2 Cc:-

R2-2103037 TS 37.340 CR for SCG deactivation and activation ZTE Corporation, Sanechips draftCR Rel-17 37.340 16.5.0 B LTE\_NR\_DC\_enh2-Core Late

[R2-2103980](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103980.zip) Introduction of further MRDC enhancements Huawei, HiSilicon CR Rel-17 38.300 16.5.0 0362 - B 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

R2-2103982 SCG activation and deactivation procedure Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core Withdrawn

#### 8.2.2.1 Deactivation of SCG

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

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

[R2-2102898](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102898.zip) Open issues for SCG deactivation procedure OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103106](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103106.zip) Discussion on Deactivation of SCG CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103153](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103153.zip) Access handling with TAT in SCG fast activation Futurewei discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103274](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103274.zip) Deactivation of SCG Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103397](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103397.zip) Discussion on SCG deactivation Lenovo, Motorola Mobility discussion Rel-17

[R2-2103503](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103503.zip) Issues on SCG deactivation procedure NEC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103681](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103681.zip) Activation and Deactivation of SCG InterDigital discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103722](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103722.zip) Discussions on deactivation of SCG CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103807](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103807.zip) SCG deactivation procedures Ericsson discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103890](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103890.zip) Deactivation of SCG Qualcomm Incorporated discussion Rel-17

[R2-2103931](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103931.zip) SCG activation/ deactivation procedure Samsung Telecommunications discussion LTE\_NR\_DC\_enh2-Core

[R2-2103977](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103977.zip) SCG deactivation Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104159](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104159.zip) NW-triggered SCG activation and deactivation MediaTek Inc. discussion

[R2-2104237](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104237.zip) Further consideration on SCG activation and 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 may use a summary document (decision to be made based on submitted tdocs).

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

[R2-2102749](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102749.zip) Considerations on RLM during SCG deactivation KDDI Corporation discussion Rel-17

[R2-2102872](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102872.zip) UE behavior when SCG is deactivated vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2102897](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102897.zip) UE measurements and reporting in deactivated SCG OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103036](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103036.zip) Discussion on UE behaviour when SCG is deactivated ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103107](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103107.zip) UE Behavior in Deactivated SCG CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103275](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103275.zip) Measurements for deactivated SCG Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103398](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103398.zip) UE behavior when SCG is deactivated Lenovo, Motorola Mobility discussion Rel-17

[R2-2103569](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103569.zip) UE Measurement Aspects in SCG Deactivation LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103682](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103682.zip) Measurements and maintenance of UL synch with a deactivated SCG InterDigital discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103808](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103808.zip) UE measurements and reporting in deactivated SCG Ericsson discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103885](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103885.zip) TA Maintenance and other UE actions in SCG deactivated state Apple discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103893](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103893.zip) UE measurements and reporting in deactivated SCG Qualcomm Incorporated discussion Rel-17

[R2-2103913](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103913.zip) UE assistance information use case for SCG deactivation Convida Wireless discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103978](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103978.zip) UE behaviour in deactivated SCG Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104124](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104124.zip) Discussion for UE behaviour in deactivated SCG SHARP Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104160](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104160.zip) UE behavior during SCG deactivation MediaTek Inc. discussion

[R2-2103740](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103740.zip) Discussion on UE behavior in deactivated SCG China Telecommunications discussion Rel-17

[R2-2103294](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103294.zip) DC power sharing for deactivated SCG Samsung discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103505](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103505.zip) Further considerations on SCG deactivation NEC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103777](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103777.zip) Mobility for deactivated SCG NTT DOCOMO, INC. discussion

#### 8.2.2.3 Activation of deactivated SCG

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

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

[R2-2102873](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102873.zip) Activation of deactivated SCG vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2102899](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102899.zip) Open issues for activation of deactivated SCG OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103035](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103035.zip) Activation and deactivation of SCG ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103108](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103108.zip) Considerations on Activation of Deactivated SCG CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

R2-2103154 Measurement report and RLM handling for deactivated SCG Futurewei discussion Rel-17 LTE\_NR\_DC\_enh2-Core Withdrawn

[R2-2103251](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103251.zip) Discussion on UE behavior when SCG is deactivated Spreadtrum Communications discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103276](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103276.zip) Activation of SCG Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103399](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103399.zip) Discussion on SCG activation Lenovo, Motorola Mobility discussion Rel-17

[R2-2103504](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103504.zip) Issues on SCG activation procedure NEC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103570](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103570.zip) Acrivation and Deactivation on SCG LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103723](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103723.zip) Discussions on activation of deactivated SCG CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103809](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103809.zip) SCG activation procedures Ericsson discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103886](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103886.zip) UE initiation of SCG re-activation request Apple discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103895](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103895.zip) Activation of deactivated SCG Qualcomm Incorporated discussion Rel-17

[R2-2103979](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103979.zip) SCG activation Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104164](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104164.zip) UE behaviour upon SCG activation MediaTek Inc. discussion

[R2-2104170](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104170.zip) Discussion on SCG activation SHARP Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104231](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104231.zip) Considerations on reactivating SCG Intel Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

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

This agenda item will be deprioritized during this meeting .

### 8.2.3 Conditional PSCell change / addition

No documents should be submitted to 8.2.3. Please submit to.8.2.3.x

#### 8.2.3.1 CPAC procedures and signalling flows

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

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

Including discussion on CPAC configuration and execution details.

Including discussion on signalling flows for Stage-2 specification.

[R2-2102861](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102861.zip) Discussion on the configuration of CPAC vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103109](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103109.zip) Summary of [Post113-e][234][eDCCA] CPAC procedures (CATT) CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

[R2-2103155](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103155.zip) Discussion on issues with SN initiated CPC Futurewei discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103158](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103158.zip) Remaining issues for SN initiated inter-SN CPC China Telecommunication discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103354](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103354.zip) Discussion on procedures in CPAC and conventional PSCell change ITRI discussion LTE\_NR\_DC\_enh2-Core

[R2-2103883](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103883.zip) Details in conditional PSCell change and addition Apple discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103932](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103932.zip) CPAC stage 2 flow, progressing remaining issues Samsung Telecommunications discussion LTE\_NR\_DC\_enh2-Core

[R2-2103986](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103986.zip) Discussion on the inter-node message design (RAN3 LS) Huawei Technologies France discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104073](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104073.zip) Further consideration on CPAC ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

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

This agenda item will not be treated in this meeting.

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

[R2-2102950](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102950.zip) Failure handling of Conditional PSCell Addition DENSO CORPORATION discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103355](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103355.zip) Discussion on SCG RLF handling in case CPC is configured ITRI discussion LTE\_NR\_DC\_enh2-Core R2-2100827

[R2-2103571](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103571.zip) Coexistence and other issues in CPAC LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2100728

[R2-2103683](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103683.zip) Coexistence of CHO and CPC InterDigital, Nokia discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2103721](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103721.zip) Combination of CPAC and CHO CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

#### 8.2.3.3 Other CPAC aspects

This agenda item will not be treated in this meeting.

[R2-2103253](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103253.zip) CPC configuration number restriction Spreadtrum Communications 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: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 threads

### 8.3.1 Organizational, Requirements and Scope

Including LSs and any rapporteur input.

[R2-2102664](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102664.zip) LS on System support for Multi-USIM devices (S2-2102039; contact: Intel) SA2 LS in Rel-17 LTE\_NR\_MUSIM-Core To:RAN2 Cc:RAN3, SA3

[R2-2103343](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103343.zip) Running CR to 36300 for Multi-USIM devices support vivo draftCR Rel-17 36.300 16.5.0 LTE\_NR\_MUSIM-Core

[R2-2103344](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103344.zip) Running CR to 38300 for Multi-USIM devices support vivo draftCR Rel-17 38.300 16.5.0 LTE\_NR\_MUSIM-Core

### 8.3.2 Paging collision avoidance

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

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

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

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

[R2-2102792](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102792.zip) Paging Collision Avoidance OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2102939](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102939.zip) Considerations for Paging Collision Avoidance Solution Samsung discussion

[R2-2102948](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102948.zip) Further Consideration on Paging Collision Avoidance CATT discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103160](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103160.zip) Paging collision solution of Multi-SIM China Telecommunication discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103185](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103185.zip) RAN Impacts for paging collision avoidance solutions for Multi-SIM Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2103193](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103193.zip) 5G-S-TMSI re-assignment is enough for paging collision avoidance in 5GS Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103225](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103225.zip) Options for paging collision avoidance Qualcomm Incorporated discussion

[R2-2103345](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103345.zip) Paging Collision Solution for 5GS vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103451](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103451.zip) UE indication of paging collision for Multi-SIM ASUSTeK discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2101749

[R2-2103480](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103480.zip) Paging Collision Avoidance Open Issues Huawei, HiSilicon discussion Rel-17

[R2-2103544](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103544.zip) Discussion on paging collision avoidance in Multi-SIM, and proposal for response to SA2. Sony Europe B.V. discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103572](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103572.zip) Considerations on Paging Collision LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103677](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103677.zip) Solutions for Paging Collision Avoidance for Multi-SIM Charter Communications, Inc discussion Rel-17

[R2-2103743](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103743.zip) Definition and solution for paging collision, RRC Inactive, SI change Lenovo, Motorola Mobility discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103757](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103757.zip) Paging collision avoidance Ericsson discussion

[R2-2103830](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103830.zip) MUSIM Page Collision Avoidance Apple discussion LTE\_NR\_MUSIM-Core

[R2-2104151](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104151.zip) Paging collision avoidance for MUSIM device MediaTek Inc. discussion

[R2-2104168](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104168.zip) Discussion of the paging collision problem in 5GS Xiaomi Communications discussion

[R2-2104242](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104242.zip) Consideration on the Paging Collision ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

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

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

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

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

[R2-2102793](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102793.zip) UE Notification on Network Switching for Multi-SIM OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2102811](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102811.zip) Analysis on various scenarios of UE switching China Telecommunications discussion Rel-17

[R2-2102940](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102940.zip) Signalling design on short time switching procedure DENSO CORPORATION discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2102949](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102949.zip) Further Consideration on Network Switching CATT discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103017](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103017.zip) Discussions on various ways to support various of leave scenarios and procedures for Multi-SIM UEs CableLabs discussion Rel-17 Late

[R2-2103184](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103184.zip) Switching notification for basic scenario for Multi-SIM Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2103194](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103194.zip) Multi-SIM busy indication signaling for INACTIVE Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103224](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103224.zip) Network switching mechanisms for Multi-SIM Qualcomm Incorporated discussion

[R2-2103247](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103247.zip) Discussion on the transmission of busy indication Spreadtrum Communications discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103300.zip) UE notification procedure for short time switching NEC discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103347](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103347.zip) Discussion on Switching Notification vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103417](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103417.zip) Switching notification and busy indication Lenovo, Motorola Mobility discussion Rel-17

[R2-2103452](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103452.zip) MUSIM Release Assistance Info for network switching ASUSTeK discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2101748

[R2-2103545](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103545.zip) Discussion on Busy Indication and Leaving in Multi-SIM Sony Europe B.V. discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103573](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103573.zip) Considerations on SIM Swithcing LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2100731

[R2-2103588](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103588.zip) On coordinated switch from NW for MUSIM device Huawei, HiSilicon discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103678](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103678.zip) Network Switching Solutions for Multi-SIM Charter Communications, Inc discussion Rel-17

[R2-2103756](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103756.zip) Graceful leaving for a Multi-USIM device Ericsson discussion

[R2-2103831](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103831.zip) MUSIM Network Switching Apple discussion LTE\_NR\_MUSIM-Core

[R2-2103832](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103832.zip) MUSIM Band Conflict and RRC Processing Delay Requirements Apple discussion LTE\_NR\_MUSIM-Core

[R2-2103957](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103957.zip) Procedures for MSIM UE notification on network switching Futurewei Technologies discussion R2-2101937

[R2-2104154](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104154.zip) Network switching behavior for MUSIM device MediaTek Inc. discussion

[R2-2104169](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104169.zip) Discussion of the UE notification on network switching for multi-SIM Xiaomi Communications discussion

[R2-2104174](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104174.zip) Open issues on network switching for Multi-USIM devices Samsung Electronics Co., Ltd discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2104211](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104211.zip) RNAU Handling in MUSIM SHARP Corporation discussion

[R2-2104215](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104215.zip) Switching Notification for leaving RRC\_CONNECTED SHARP Corporation discussion

[R2-2104243](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104243.zip) Consideration on the Switching Notification Procedure ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2104244](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104244.zip) Consideration on the Busy Indication ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103346](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103346.zip) Handling leftovers from email discussion on Switching Notification vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

### 8.3.4 Paging with service indication

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

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

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

[R2-2102794](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102794.zip) Paging with Service Indication OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2102913](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102913.zip) Discussion on support of paging cause for multi-USIM devices Samsung Electronics Co., Ltd discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103186](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103186.zip) Further analysis on Service type indication in paging and signalling mechanism for BUSY indication Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2103195](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103195.zip) Support for Multi-SIM paging cause from SA2 LS Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103226](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103226.zip) Paging Cause and Busy Indication Qualcomm Incorporated discussion

[R2-2103246](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103246.zip) Supporting of Paging Cause Solution detection Spreadtrum Communications discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103248](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103248.zip) Discussion on the transmission of paging cause Spreadtrum Communications discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103304](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103304.zip) Introduction of paging cause China Telecommunications discussion

[R2-2103348](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103348.zip) Introduction of Paging Cause vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103483](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103483.zip) Discussion on the paging with service indication Huawei, HiSilicon discussion Rel-17

[R2-2103574](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103574.zip) Support of Paging Cause LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2103758](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103758.zip) Introduction of a Paging cause indication Ericsson discussion

[R2-2103958](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103958.zip) Discussion on paging service indication for MUSIM Futurewei Technologies discussion

[R2-2104158](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104158.zip) Paging with service indication MediaTek Inc. discussion

[R2-2104171](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104171.zip) Discussion 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.

Work Plan

[R2-2103080](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103080.zip) Updated Rel-17 IAB Workplan Qualcomm Incorporated, Samsung (WI rapporteurs) Work Plan Rel-17 NR\_IAB\_enh R2-2100591

* Workplan is noted

LS in

[R2-2102608](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102608.zip) Reply LS on inter-donor topology redundancy (R1-2101880; contact: Samsung) RAN1 LS in Rel-17 NR\_IAB\_enh-Core To:RAN3 Cc:RAN2

- Both scenario 1 and 2 are now agreements

* Noted

[R2-2102636](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102636.zip) LS on inter-donor-DU re-routing (R3-211298; contact: Huawei) RAN3 LS in Rel-17 NR\_IAB\_enh-Core To:RAN2 Cc:-

- Reply requested

* Noted

[R2-2102638](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102638.zip) LS on inter-donor topology redundancy (R3-211331; contact: Samsung) RAN3 LS in Rel-17 NR\_IAB\_enh-Core To:RAN2 Cc:-

* Noted

[R2-2102637](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102637.zip) LS on DAPS-like solution for IAB (R3-211326; contact: Qualcomm) RAN3 LS in Rel-17 NR\_IAB\_enh-Core To:RAN2 Cc:-

* Noted

LS out

[R2-2104117](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104117.zip) Draft Reply LS on inter-donor-DU re-routing Huawei, HiSilicon LS out Rel-17 NR\_IAB\_enh-Core To:RAN3

Other

[R2-2103842](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103842.zip) On UE L2 re-ordering buffer size concerns in IAB Networks Apple discussion NR\_IAB\_enh-Core

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

This meeting Focus on solutions for the agreed issues.

[R2-2104491](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104491.zip) Summary of Rel-17 IAB contributions on fairness, latency and congestion Qualcomm (WI rapporteur) discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104535](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104535.zip) Summary of Rel-17 IAB contributions on fairness, latency and congestion Qualcomm (WI rapporteur) discussion Rel-17 NR\_IAB\_enh-Core

DISCUSSION

General

- LG think 17 companies participated, and think 3 company bar is very low.

P1

- LG think PDB can be met normally by configuration, and don’t really see for which case this would be useful. Think BE service don’t need this. Shall we use this for discard?

- IDT think this is useful, but agree that full timestamp could be significant overhead, and think this is used to prioritize packets but more info is needed to make it useful to determine prioritization.

- Intel are concerned about overhead, think hop-number can be used. Can be used with P5. Either discard or prioritization can be left for impl.

- QC think overhead is not a significant reason. Think this can work.

- ZTE think the whole mechanism is not clear. Will it impact LCP? Think we need to discuss many things, to early to decide.

- Ericsson think it is not clear how this can be used, think a IAB node anyway need to act on he PDB. Think remaining PDB is clear but timestamp is vague

- Samsung think usefulness is e.g. to help impl to discard. Support this, but right now the proposal is too general.

- Huawei think timestamp doesn’t work, and think it is difficult to interpret remaining PDB. Think we should be careful on changing the PDU header.

- Apple think OH is not an issue. Think the hop-by-hop mechanism isn’t sufficient as latency dep on more things than hops. Think loss can also be important.

- Chair: It is not clear (yet) how such mechanism would work, it seems the intentions are to support prioritization and discard.

P7

- IDT think there are many details that would need to be discussed. E.g. is this fof a RLC bh channel

- LG think this is a frequently changing value and think it is not clear what is measured think R3 need to confirm whether this is needed.

- Samsung think this is related to the CU configuring routing and PDB per hop, system can then react to load.

- Ericsson agrees with the intention but think R3 should handle this, think this is similar to what R3 discusses for congestion. Huawei agrees. QC think this is between R2 and R3. QC think R2 can discuss and sent LS to R3. LG agrees with Ericsson.

- vivo support but agree to wait for R3.

- Intel think this is like immediate MDT and this should be discussed in MDT session. Chair think it belongs in IAB session.

- Apple think we can send an LS to R3.

- Huawei, Ericsson, LG don’t want to Agree to P7. LG think we wait for R3 solution on congestion.

- Chair: There seems to be interest to report something like this to CU (hop latency), right now too much opposition to agree.

P2

- IDT think bearer ID is not global, wonder if this is global information. SS think that bearer ID doesn’t need to be global, just global within one CU is sufficient. QC agrees that uniqueness is not a big issue.

- LG think Bearer ID is for per-bearer control, but think this shold be configured. This is for N-to-1 mapping but think this is for best effort service. Chair think that only GBR requires 1-to-1, other qos classes can use 1-to-N.

- CATT think IAb doesn’t support remapping so bearer ID is not needed.

- QC think 1-to-1 bearer mapping can be used so this is not so useful. Ericsson think that everything need to be reconfigured if 1-to-1 mapping is use.

- SS think this helps in providing fairness.

- Chair: no consensus for now.

* LCG range to be extended for IAB-MT. Size of LCG and enhancements to BSR are FFS

[R2-2102727](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102727.zip) Consideration on topology-wide fairness, multi-hop latency and congestion mitigation CATT discussion NR\_IAB\_enh-Core

[R2-2102833](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102833.zip) IAB topology-wide fairness and latency enhancement Intel Corporation discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103081](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103081.zip) Fairness support in IAB topology Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh

[R2-2103082](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103082.zip) Enhancements to improve IAB multi-hop latency Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh R2-2100594

[R2-2103138](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103138.zip) Discussion on topology-wide fairness multi-hop latency and congestion mitigation ZTE, Sanechips discussion Rel-17

[R2-2103283](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103283.zip) Discussion on the fairness improvement, multi-hop latency and congestion mitigation Fujitsu discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103349](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103349.zip) Discussion on miscellaneous issues in eIAB vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103353](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103353.zip) An elaboration of required PDB for multi-hop latency ITRI discussion NR\_IAB\_enh-Core R2-2100824

[R2-2103370](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103370.zip) Possible solutions for topology-wide fairness, multi-hop latency and congestion mitigation in eIAB Kyocera discussion Rel-17

[R2-2103418](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103418.zip) Further consideration on identified issues for fairness, latency and congestion LG Electronics Inc. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103499](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103499.zip) Fairness, latency and congestion – solutions to identified issues Samsung Electronics GmbH discussion

[R2-2103526](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103526.zip) Fairness, latency, congestion Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103562](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103562.zip) Solutions to improve topology-wide fairness, latency and congestion mitigation Sony Europe B.V. discussion NR\_IAB\_enh-Core

[R2-2103684](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103684.zip) Enforcing multi-hop latency in multi-hop IAB InterDigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103685](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103685.zip) Fairness and congestion mitigation in multi-hop IAB InterDigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103840](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103840.zip) Solutions to ensure fairness, latency bounds and mitigation of congestion impacts in eIAB Networks Apple discussion NR\_IAB\_enh-Core

[R2-2103940](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103940.zip) On Topology-wide Fairness, Multi-hop Latency, and Congestion in IAB Network Ericsson discussion NR\_IAB\_enh-Core

[R2-2103955](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103955.zip) Multi-hop scheduling and local routing enhancements for IAB AT&T discussion

[R2-2103987](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103987.zip) Rel. 17 IAB enhancements for fairness, multi-hop latency reduction, and congestion mitigation Futurewei Technologies discussion R2-2101820

[R2-2104123](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104123.zip) Enhancements for topology-wide fairness, multi-hop latency and congestion mitigation Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

### 8.4.3 Topology adaptation enhancements

Include solutions for the agreed issues.

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

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

[R2-2102730](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102730.zip) Report from email discussion [Post113-e][057][IAB17] CHO and DAPS for IAB (CATT) CATT discussion NR\_IAB\_enh-Core

DISCUSSION

P1

- LG think that the intention is to exclude CHO for load balancing, and this indeed agreeable.

- Ericsson think this confirms that the use cases are as for legacy.

P3

- ZTE and Huawei think that RLF-trigger can be used with CHO already today.

P4

- LG think the open point is whether type 2 RLF indication can be used as trigger. Samsung and Nokia agrees.

- Intel think that if we go that way there may be many events, think also A4 was discussed but think it is not needed for IAB.

- Sony think other events can be considered.

- NEC think A3 and A5 should be combined with RLF indication.

P5

- Huawei think this shall be captured, to look at interruption time. CATT agrees.

- QC and Ericsson think this is in RAN3 domain. Ericsson further think we shold avoid impacting the UEs.

- Chair think our work is input driven so unless there are specific issues that Ran2 should focus on, this proposal seems very vague. Think R2 shall not redo Ran3 work but can look at specific issues

- Chair will not capture this for now, too generic and overlapping w R3

P6

- QC think this is a major RAN3 discussion, can do a legacy handover.

- IDT think we need R3 input, but think e..g inter CU and intra CU can be discussed in R2.

- CATT think we can ask R3 by LS.

- ZTE think these proposals are too general, R3 has dicussed whether NCGI, PCI, frequency can change. Chair think indeed that will impact every UE in the Cell, and that HO may be needed for the UEs if service interruption is to be avoided.

- Intel think this proposal is unclear, e.g. whether parent can be changed. Can wait for RAN3 input.

- Chair: doesn’t capture any for this for now.

P7

- Nokia think that DAPS assupmtions are very similar as for NR-DC, doesn’t seen any benefits with DAPS additional to NR-DC.

P: What is the difference between NR-DC and DAPS-like?

- Huawei agrees with Nokia, and there is no service interruption with NR-DC.

- AT&T can serve all DAPS UC there is no advantanges for DAPS like

- Ericsson agrees with above observations, think DAPS-like wording was confusing.

- QC think NR-DC can be used for load balancing, think there is a gain in interruption time.

- Sony think here it would not be used for HO but think that with DAPS there can be two protocol stacks without PDCP. Think we can have e.g. duplication on RLC level, can be introduced for eIAB

- Sony think that a DAPS-like way for IAB would be more long term than handover.

- Samsung think NR-DC and DAPS like has two different purposes. Think that e.g. Role-changes MCG SCG are complex and a handover may be easier.

- Chair: Think the wording DAPS-like may have been unfortunate. Will not capture any agreement for now. The situation is that NR-DC is already in scope of IAB from previous, and also any functionality may actually be used. However for the mobility features in the baseline that depend on PDCP we need to be specific in what is the wanted benefit for enhancements. Can indeed consider enhancements to single-link scenarios and they may be DAPS like, but we should also then specify which issues to be addressed (as this is more important).

- Chair: We will not make any general agreement to support or not support *DAPS-like* mobility as this is too wide and there is divergent understanding what are the issues to resolve and how.

* The use cases for IAB-MT CHO should be migration and RLF recovery.
* RAN2 should have a common solution for intra-CU/intra-DU CHO and intra-CU/inter-DU CHO.
* condEventA3 and condEventA5 are applicable to IAB-MT
* FFS if other CHO execution condition is needed (e.g. whether type 2 RLF indication can be used as trigger)

[R2-2103083](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103083.zip) Report [Post113-e][058][IAB17] Inter-donor topology adaptation Qualcomm Incorporated report Rel-17 NR\_IAB\_enh

DISCUSSION

0b:

- ZTE wonder why we would use F1C over RRC if F1C over BAP can be used.

- QC think that for Scenario 2 we can use a split SRB.

- HW and SS think no

- LG think there is confusion and that it is not valid to have both these options to connect between the same nodes.

1a:

-

2: Split SRB2 - SRB3

- Huawei think that split SRB2 should be the baseline. Ericsson and Huawei agrees. Ericsson think for Scenario 2 split SRB2 is logical, donor is the MN. Intel agrees.

- Chair think that at least we target to set a basline.

- SS think we need to add some exceptional behaviour for SRB2 so there is more work with this.

- LG wonder whether we cannot support both of them. ZTE agrees with LG.

- Huawei think the two options are not agreeable for now.

* SRB2 can be used for F1-C transport in CP/UP-separation scenario 1 (FFS other cases)
* Split SRB2 can be used for F1-C transport in CP/UP-separation scenario 2 (FFS other cases)

CAN come back to P3 next week if time.

[R2-2102728](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102728.zip) Mobility of Descendant IAB-Nodes CATT discussion NR\_IAB\_enh-Core

[R2-2102729](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102729.zip) RLF Indication and Local Rerouting CATT discussion NR\_IAB\_enh-Core

[R2-2102834](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102834.zip) Intra-donor CHO, local rerouting and RLF indication enhancement Intel Corporation discussion Rel-17 NR\_IAB\_enh-Core

[R2-2102835](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102835.zip) Inter-donor topology adaptation and topology redundancy Intel Corporation discussion Rel-17 NR\_IAB\_enh-Core

[R2-2102844](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102844.zip) Discussion on DAPS-like solution for IAB Intel Corporation discussion Rel-17 NR\_IAB\_enh-Core

[R2-2102931](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102931.zip) Discussion on BH RLF LG Electronics France discussion Rel-17 NR\_IAB\_enh-Core

[R2-2102933](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102933.zip) Discussion on CHO and DAPS-like Solution LG Electronics France discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103084](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103084.zip) Topology adaptation enhancements Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh

[R2-2103128](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103128.zip) Discussion on topology adaptation enhancements Samsung Electronics Nordic AB discussion

[R2-2103139](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103139.zip) Discussion on RLF indication and local re-routing ZTE, Sanechips discussion Rel-17

[R2-2103140](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103140.zip) Discussion on CP-UP separation and topology redundancy ZTE, Sanechips discussion Rel-17

[R2-2103141](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103141.zip) Discussion on supporting CHO and DAPS in IAB ZTE, Sanechips discussion Rel-17

[R2-2103161](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103161.zip) DAPS like HO for IAB NEC discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103162](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103162.zip) CHO for IAB NEC discussion Rel-17 NR\_MBS-Core

[R2-2103284](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103284.zip) Topology adaptation enhancements Fujitsu discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103285](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103285.zip) Discussion on the inter-donor topology redundancy Fujitsu discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103286](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103286.zip) Re-routing for UL packet loss reduction Fujitsu discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103350](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103350.zip) On DAPS like operation of eIAB vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103351](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103351.zip) On intra-donor CHO of eIAB vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103352](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103352.zip) On BAP routing of intra-CU local rerouting and inter-donor DC vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103371](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103371.zip) Details of topology adaptation enhancements for eIAB Kyocera discussion Rel-17

[R2-2103391](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103391.zip) CHO in IAB system Lenovo, Motorola Mobility discussion Rel-17

[R2-2103392](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103392.zip) Discussion on DAPS for IAB network Lenovo, Motorola Mobility discussion Rel-17

[R2-2103393](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103393.zip) Discussion on IAB packet rerouting Lenovo, Motorola Mobility discussion Rel-17

[R2-2103419](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103419.zip) Discussion on inter-donor DU local re-routing and further details on local re-routing LG Electronics Inc. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103453](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103453.zip) Handling Type-2 & Type-3 RLF indication ASUSTeK discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103477](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103477.zip) New triggers for local rerouting Samsung Electronics GmbH discussion

[R2-2103484](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103484.zip) Inter-donor-DU rerouting Samsung Electronics GmbH discussion

[R2-2103559](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103559.zip) Multi-parent options Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103560](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103560.zip) Re-routing enhancements and RLF indications in IAB Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103561](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103561.zip) Inter-donor-DU rerouting for IAB Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103563](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103563.zip) Topology adaptation enhancements in IAB Sony Europe B.V. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103565](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103565.zip) DAPS-like solution in IAB Sony Europe B.V. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103686](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103686.zip) CHO triggering In IAB InterDigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103687](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103687.zip) On DAPS support in IAB InterDigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2103841](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103841.zip) Discussion on topology adaptation enhancements in eIAB Networks Apple discussion NR\_IAB\_enh-Core

[R2-2103938](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103938.zip) On IAB Inter-donor Topology Adaptation Ericsson discussion NR\_IAB\_enh-Core

[R2-2103939](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103939.zip) On CHO and DAPS for IAB Ericsson discussion NR\_IAB\_enh-Core

[R2-2103941](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103941.zip) CP/UP Separation in IAB Network Ericsson discussion NR\_IAB\_enh-Core

[R2-2104120](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104120.zip) Inter-donor-DU rerouting and local rerouting enhancement Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104121](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104121.zip) Inter-donor routing for R17-IAB Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104122](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104122.zip) F1 over NR access link, CHO and DAPS Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104152](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104152.zip) RAN2 impacts of Rel.17 IAB topology adaptation enhancements Futurewei Technologies discussion R2-2101798

### 8.4.4 Duplexing enhancements RAN2 scope

This AI will be deprioritized during this meeting.

## 8.5 NR IIoT URLLC

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

Time budget: 0 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 0 threads

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

### 8.5.1 Organizational

Rapporteur input

No input expected

[R2-2102631](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102631.zip) LS on gNB-based propagation delay compensation (R3-211136; contact: Nokia) RAN3 LS in Rel-17 NR\_IIOT\_URLLC\_enh To:RAN1, RAN2 Cc:-

### 8.5.2 Enhancements for support of time synchronization

Including requirements and scope.

No input expected

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

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

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

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

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

[R2-2102685](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102685.zip) CG Harmonization for Unlicensed Controlled Environment Qualcomm Incorporated discussion Rel-17

[R2-2102725](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102725.zip) URLLC in UCE CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2102992](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102992.zip) HARQ Process Prioritization of Configured Grant for IIoT in NR-U Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2103059](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103059.zip) Remaining issues about uplink enhancements for URLLC in UCE Huawei, HiSilicon discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2103072](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103072.zip) Uplink enhancements for URLLC in unlicensed controlled environments Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103126](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103126.zip) Issue of Prioritizing Initial Transmission over Retransmission on a CG vivo discussion

[R2-2103211](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103211.zip) Consideration on URLLC over NRU OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103297](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103297.zip) Enhancements for URLLC in unlicensed controlled environments Lenovo, Morotola Mobility discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103428](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103428.zip) Harmonizing UL CG enhancements in NR-U and URLLC Ericsson discussion Rel-17

[R2-2103441](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103441.zip) Further Consideration on the UL transmission in UCE ZTE Corporation, Sanechips discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103492](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103492.zip) CG Harmonization for NR-U and IIoT/URLLC in Unlicensed Controlled Environments III discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2103566](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103566.zip) Prioritization of UL transmissions in unlicensed URLLC Sony Europe B.V. discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103648](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103648.zip) CG Harmonization for UCE Samsung discussion Rel-17

[R2-2103688](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103688.zip) Discussion on the remaining issue for uplink enhancements for URLLC in UCE CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2103797](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103797.zip) IIoT operation in unlicensed controlled environments InterDigital discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2104103](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104103.zip) Further details on harmonization LG Electronics UK discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104224](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104224.zip) Remaining issues of CG harmonization Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

=> Revised in [R2-2104288](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104288.zip)

[R2-2104288](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104288.zip) Remaining issues of CG harmonization Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

### 8.5.4 RAN enhancements based on new QoS

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

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

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

[R2-2102686](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102686.zip) RAN Enhancement to support new QoS Qualcomm Incorporated discussion Rel-17

[R2-2102726](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102726.zip) Handling of Survival Time CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2102993](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102993.zip) RAN Enhancement for New QoS Parameters Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2103060](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103060.zip) RAN enhancements based on new QoS related parameters Huawei, HiSilicon discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2103125](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103125.zip) Discussion on RAN enhancement to support survival time vivo discussion

[R2-2103196](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103196.zip) Topics on new QoS handling Fujitsu discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2000418

[R2-2103212](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103212.zip) RAN enhancement based on new QoS OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103329](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103329.zip) Further considerations on new QoS ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion NR\_IIOT\_URLLC\_enh-Core R2-2100328

[R2-2103420](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103420.zip) Discussion on RAN enhancements based on Survival Time III discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2100449

[R2-2103429](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103429.zip) RAN enhancements based on new QoS related parameters Ericsson discussion Rel-17

[R2-2103432](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103432.zip) Entering and operating in the Survival Time state Samsung Electronics GmbH discussion

[R2-2103689](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103689.zip) Discussion on the RAN support for new QoS parameters CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2103735](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103735.zip) RAN2 Enhancements for Support of QoS Parameters Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103798](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103798.zip) Enhancements based on new QoS requirements InterDigital discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2103896](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103896.zip) Discussion on entering and exiting survival time state Futurewei Technologies discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2104097](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104097.zip) View on survival time mechanisms LG Electronics UK discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104225](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104225.zip) Clarification on the survival time Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2104265](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104265.zip) RAN enhancements based on new QoS TCL Communication Ltd. discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

## 8.6 Small Data enhancements

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

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

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

### 8.6.1 Organizational

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

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

[R2-2102620](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102620.zip) Reply LS on physical layer aspects of small data transmission (R1-2102125; contact: ZTE) RAN1 LS in Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN2

[R2-2102634](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102634.zip) Reply LS on small data transmission (R3-211280; contact: Ericsson) RAN3 LS in Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN2 Cc:-

[R2-2102707](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102707.zip) Report from email discussion [POST113-e][501][SDT] Selection criteria and overall Procedure Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103022](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103022.zip) Summary of General and other control plane open issues for SDT (email: [Post 113-e][502]) Rapporteur (ZTE) discussion

[R2-2103527](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103527.zip) Stage-2 running CR Introduction of SDT Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.5.0 0357 - B NR\_SmallData\_INACTIVE-Core

[R2-2103897](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103897.zip) DRAFT Reply LS on small data transmission Ericsson LS out Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN3

[R2-2104490](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104490.zip) DRAFT Reply LS on physical layer aspects of small data transmission (Reply to [R2-2102620](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102620.zip)) ZTE Corporation LS out Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN1

### 8.6.2 User plane common aspects

Overall user plane procedure for SDT (including triggering and thresholds, HARQ, and MAC CEs), data volume computation,. suppression of PDCP status report, RSRP threshold for SDT selection, switching between CG/RA, and any other user aspects included in Post113-e][501][503] which cannot be concluded as part of the email

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

[R2-2102708](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102708.zip) User Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102750](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102750.zip) Discussion on user plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102755](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102755.zip) Discussion on User Plane Aspect of Small Data Transmission vivo discussion NR\_SmallData\_INACTIVE-Core R2-2100139

[R2-2102840](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102840.zip) User plane aspects for SDT Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103018](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103018.zip) User plane open issues for SDT ZTE Corporation, Sanechips discussion

[R2-2103102](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103102.zip) Analysis on UP common aspects of SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103197](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103197.zip) Support of CA and PDCP CA duplication Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2100419

[R2-2103319](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103319.zip) The UP common issues for small data transmissions Lenovo, Motorola Mobility discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103430](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103430.zip) Discussion on user plane common aspects of NR small data transmission Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2101221

[R2-2103444](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103444.zip) Discussion on data volume threshold for small data transmission PANASONIC R&D Center Germany discussion

[R2-2103454](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103454.zip) Avoid triggering RA during subsequent SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103521](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103521.zip) Common aspects for SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103528](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103528.zip) User Plane common aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103531](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103531.zip) User plane common aspects for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103583](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103583.zip) Some aspects of User Plane for SDT in NR Sony Europe B.V. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103672](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103672.zip) Discussion on small data transmission Google Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103674](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103674.zip) Discussion on beam operations for small data transmission Google Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103714](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103714.zip) Remaining issues on transmission type selection and overall procedure CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103870](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103870.zip) User plane aspects on the SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103990](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103990.zip) Consideration on overall SDT procedure and criteria LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104206](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104206.zip) On the overall and detailed procedure of SDT China Telecommunications discussion

[R2-2104220](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104220.zip) Discussion on data volume calculation Xiaomi Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104263](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104263.zip) Discussion on Small Data Transmission TCL Communication Ltd. discussion Rel-17

### 8.6.3 Control plane common aspects

Cell reselection and failure handling, handling of subsequent data transmissins (including, how to indicate presence of subsequent data, etc) handling of non-SDT DRBs (including whether to resume or not non-SDT), CP data over SDT, SDT termination and data loss prevention and any other control plane aspects included in [Post113-e][501][502][503] which cannot be concluded as part of the email

[R2-2102709](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102709.zip) Control Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102751](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102751.zip) Discussion on control plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102756](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102756.zip) Discussion on RRC-Controlled Small Data Transmission vivo discussion NR\_SmallData\_INACTIVE-Core R2-2100140

[R2-2102841](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102841.zip) Signalling and NAS-AS interaction for SDT Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102842](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102842.zip) Fallback and failure handling for SDT Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

R2-2102900 New timers for SDT failure detection Langbo discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

=> Withdrawn

[R2-2102991](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102991.zip) Handling of non-SDT traffic arrival PANASONIC R&D Center Germany discussion

[R2-2103019](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103019.zip) Control plane aspects of SDT ZTE Corporation, Sanechips discussion

[R2-2103103](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103103.zip) Considerations on Some Common Control Plane Issues CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103151](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103151.zip) Handling of non-SDT data arrival Potevio Company Limited discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103198](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103198.zip) RAN paging reception and response during SDT Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103257](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103257.zip) Handling of non-SDT data during SDT ETRI discussion

[R2-2103299](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103299.zip) Discuss on solutions for arriving of non-SDT data during SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103405](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103405.zip) Consideration on CP issues for small data transmission Lenovo, Motorola Mobility discussion Rel-17

[R2-2103431](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103431.zip) Discussion on control plane common aspects of NR small data transmission Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2101223

[R2-2103455](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103455.zip) Beam management in SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103497](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103497.zip) SDT control plane aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2103522](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103522.zip) CP aspects for SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103568](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103568.zip) Discussion on subsequent SDT in NR, timer handling, and support for SRB1/2 Sony Europe B.V. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103715](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103715.zip) Non-SDT data transmission CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103796](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103796.zip) Subsequent small data transmission InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103867](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103867.zip) Non-SDB handling during the SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103868](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103868.zip) Control plane aspects on the SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103904](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103904.zip) Control plane common aspects for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103970](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103970.zip) CP and configuration aspects for small data InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103971](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103971.zip) Report of [Post113-e][503][SDT] T319, cell reselection and re-establishment InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103972](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103972.zip) [Draft] LS to SA WG3 on re-use of same NCC and I-RNTI value for RRC Resume procedure in different cells during small data transmission procedure. InterDigital LS out Rel-17 NR\_SmallData\_INACTIVE-Core To:SA3

[R2-2103989](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103989.zip) Discussion on switching to non-SDT procedure LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103991](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103991.zip) Discussion on cell reselection during SDT LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104204](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104204.zip) Resuming non-SDT RBs and indication LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2104221](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104221.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

[R2-2104222](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104222.zip) Technical details of the RRC-less SDT Xiaomi Communications, ASUSTeK, Fujitsu, Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.4 Aspects specific to RACH based schemes

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

[R2-2102710](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102710.zip) Details of RACH bsaed Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102752](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102752.zip) Discussion on RACH based SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102757](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102757.zip) Supporting Small Data Transmission via RA Procedure vivo discussion NR\_SmallData\_INACTIVE-Core R2-2100141

[R2-2102847](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102847.zip) Fallback issue for 2-step RA based small data transmission Sharp discussion NR\_SmallData\_INACTIVE-Core R2-2100413

[R2-2103020](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103020.zip) Open issues for RACH based SDT ZTE Corporation, Sanechips discussion

[R2-2103104](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103104.zip) Considerations on Procedures without Anchor Relocation CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103105](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103105.zip) Analysis on Search Space of RA-SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103252](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103252.zip) Discussion on RACH-based SDT Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103264](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103264.zip) PDCCH monitoring in subsequent data transmission period Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103403](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103403.zip) Analysis on open issues of RA based SDT Lenovo, Motorola Mobility discussion Rel-17

[R2-2103433](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103433.zip) Discussion on RACH based NR small data transmission Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2101231

[R2-2103456](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103456.zip) Discussion on RO configuration between SDT and non-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103519](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103519.zip) RACH based SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103529](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103529.zip) Details of context fetch and data forwarding Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103580](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103580.zip) Discussion on context fetch and anchor relocation Sony Europe B.V. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103716](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103716.zip) Anchor relocation and context fetch CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103869](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103869.zip) Subsequent data transmission for SDT Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103903](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103903.zip) Small data transmission with RA-based schemes Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.5 Aspects specific to CG based schemes

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

CG resources, configuration and selection, validity of CG resources, multiple CG configurations, handling of beam selection for CG (including association between CGs and SSBs) etc, any other aspects included in [Post113-e][504][SDT] which cannot be concluded as part of the email

[R2-2102711](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102711.zip) Details of Configured Grant based Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102753](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102753.zip) Discussion on CG based SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2102758](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102758.zip) Supporting Small Data Transmission via CG configuration vivo discussion NR\_SmallData\_INACTIVE-Core

[R2-2102843](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102843.zip) On Configured Grant aspects for SDT Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103021](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103021.zip) Open issues for CG based SDT ZTE Corporation, Sanechips discussion

[R2-2103199](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103199.zip) PDCCH monitoring after TAT expiry Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2000420

[R2-2103265](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103265.zip) CG-SDT based on beam operation Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103367](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103367.zip) Aspects specific to CG based SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2103404](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103404.zip) Consideration on CG based small data transmission Lenovo, Motorola Mobility discussion Rel-17

[R2-2103434](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103434.zip) Discussion on CG based NR small data transmission Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2101233

[R2-2103457](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103457.zip) Beam selection for CG-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2101752

[R2-2103520](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103520.zip) Details of CG based SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103532](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103532.zip) Small data transmission with CG-based scheme Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103533](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103533.zip) Report from [POST113-e][504][SDT] CG Open Issues Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103581](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103581.zip) Details of CG-based scheme for SDT in NR Sony Europe B.V. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2103795](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103795.zip) CG-based SDT InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104223](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104223.zip) Remaining issues of CG SDT Xiaomi Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104241](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104241.zip) On CG Resource Configuration in Small Data enhancement China Telecommunications discussion

## 8.7 NR Sidelink relay SI

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

Time budget: 1.5 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 4-5 threads

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

### 8.7.1 Organizational

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

[R2-2102890](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102890.zip) Work planning for R17 SL relay OPPO, CMCC Work Plan Rel-17

=> Revised in [R2-2104299](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104299.zip)

[R2-2104299](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104299.zip) Work planning for R17 SL relay OPPO, CMCC Work Plan Rel-17

### 8.7.2 Relay discovery

Re-using LTE discovery as baseline.

[R2-2102687](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102687.zip) Discussion on relay discovery Qualcomm Incorporated discussion

[R2-2102698](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102698.zip) Discovery for Sidelink U2N Relay CATT discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102806](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102806.zip) Discovery Procedure for sidelink relay InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102978](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102978.zip) Discussion on Relay discovery in Sidelink Relay ZTE Corporation, Sanechips discussion Rel-17

[R2-2103000](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103000.zip) Left issues for SL discovery Ericsson discussion Rel-17

[R2-2103006](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103006.zip) Discussion on NR sidelink relay discovery OPPO discussion Rel-17

[R2-2103010](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103010.zip) NR Sidelink Relaying Discovery Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2103071](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103071.zip) SL Relay Discovery Aspects Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2103085](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103085.zip) SL relay discovery message Samsung discussion Rel-17

[R2-2103205](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103205.zip) Discussion on sidelink relay discovery SHARP Corporation discussion

[R2-2103227](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103227.zip) Discovery resources for sidelink relaying Kyocera discussion Rel-17

[R2-2103229](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103229.zip) Relay discovery considerations Kyocera discussion Rel-17

[R2-2103236](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103236.zip) Discussion on relay discovery Spreadtrum Communications discussion Rel-17

[R2-2103323](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103323.zip) Discussions on Relay discovery procedure vivo discussion Rel-17

[R2-2103389](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103389.zip) Relay Discovery in L2 and L3 U2N relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2103424](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103424.zip) Sidelink Relay Discovery, Open Issues Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2103493](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103493.zip) Support of discovery for sidelink relay Huawei, HiSilicon discussion Rel-17

[R2-2103498](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103498.zip) Restricted Sidelink Relay Discovery Within Sidelink Groupcast Nokia Germany discussion Rel-17 FS\_NR\_SL\_relay

[R2-2103575](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103575.zip) On relay discovery MediaTek Inc. discussion Rel-17

[R2-2103856](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103856.zip) Evaluation of PC5 link quality based on relay discovery Apple discussion

[R2-2103992](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103992.zip) Discovery message transmission LG Electronics Inc. discussion

[R2-2104297](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104297.zip) Summary of 8.7.2 relay discovery Huawei, HiSilicon discussion Rel-17 NR\_SL\_enh-Core

### 8.7.3 Relay re/selection

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

[R2-2102692](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102692.zip) Discussion on relay (re)selection Qualcomm Incorporated discussion

[R2-2102699](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102699.zip) Sidelink Relay (Re)Selection CATT discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102807](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102807.zip) Relay selection and reselection InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102960](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102960.zip) Further considerations on relay (re)selection ETRI discussion

[R2-2102977](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102977.zip) Discussion on Relay selection in Sidelink Relay ZTE Corporation, Sanechips discussion Rel-17

[R2-2103001](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103001.zip) Aspects for SL relay selection and reselection Ericsson discussion Rel-17

[R2-2103007](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103007.zip) Discussion on NR sidelink relay (re-)selection OPPO discussion Rel-17

[R2-2103009](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103009.zip) NR Sidelink Relay (Re-)Selection Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2103086](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103086.zip) SL relay selection and reselection triggering criteria Samsung discussion Rel-17

[R2-2103237](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103237.zip) Discussion on relay selection and reselection Spreadtrum Communications discussion Rel-17

[R2-2103311](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103311.zip) UE-to-Nwk Relay Discovery and (Re)selection for Path Switching in SL Relay Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_SL\_relay R2-2101211

[R2-2103324](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103324.zip) Discussions on Relay (re-)selection procedure vivo discussion Rel-17

[R2-2103390](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103390.zip) Relay (re)selection for L2 and L3 U2N case Lenovo, Motorola Mobility discussion Rel-17

[R2-2103422](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103422.zip) Sidelink Relay Reselection and Selection, proposal for outline procedure Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2103423](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103423.zip) NR sidelink relay (re)selection MediaTek Inc. discussion

[R2-2103584](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103584.zip) Relay (re)selection Sony Europe B.V. discussion Rel-17

[R2-2103667](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103667.zip) Discussion on relay selection and reselection Nokia, Nokia Shanghai Bell discussion Rel-17

[R2-2103717](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103717.zip) Consideration on Relay selection and reselection CMCC discussion Rel-17 FS\_NR\_SL\_relay

[R2-2103739](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103739.zip) Discussion on SL Relay (re)selection Intel Corporation discussion Rel-17

[R2-2103884](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103884.zip) Discussion on sidelink relay (re)selection Apple discussion Rel-17

[R2-2103993](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103993.zip) Relay UE selection criterion using SL-unicast and discovery message LG Electronics Inc. discussion Rel-17

[R2-2103994](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103994.zip) Relay (re-)selection and path switching LG Electronics Inc. discussion Rel-17

[R2-2103995](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103995.zip) Discovery message contents and relay selection criteria LG Electronics Inc. discussion Rel-17

[R2-2104130](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104130.zip) Discussion on relay selection and reselection Huawei, HiSilicon discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104262](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104262.zip) Relay UE load as an additional AS criterion for relay (re-)selection Philips International B.V. discussion Rel-17 FS\_NR\_SL\_relay

R2-2104287 Summary of Agenda Item 8.7.3 (relay selection/reselection) Qualcomm Incorporated discussion Rel-17 FS\_NR\_SL\_relay

### 8.7.4 L2 relay specific topics

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

#### 8.7.4.1 Control plane procedures

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

[R2-2102693](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102693.zip) RRC management procedures of L2 U2N relay Qualcomm Incorporated discussion

[R2-2102695](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102695.zip) System information, paging delivery and UAC in L2 U2N relay Qualcomm Incorporated discussion

[R2-2102700](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102700.zip) Control Plane Procedures of L2 Relay CATT discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102701](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102701.zip) Service Continuity for L2 U2N Relay CATT discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102747](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102747.zip) Discussion on Control Plane Aspects for L2 Relay OPPO discussion Rel-17 Late

[R2-2102779](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102779.zip) Connection establishment for L2 UE-to-Network Relay MediaTek Inc. discussion Rel-17

[R2-2102780](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102780.zip) Further details on System Information Delivery MediaTek Inc. discussion Rel-17

[R2-2102809](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102809.zip) Connection Management for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102810](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102810.zip) Control Plane Procedures for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102891](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102891.zip) Left issues on RRC procedure for L2 U2N Relay OPPO discussion Rel-17

[R2-2102968](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102968.zip) Connection on L2 relay Xiaomi communications discussion

[R2-2102969](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102969.zip) Discussion on resouce allocation for remote UE Xiaomi communications discussion

[R2-2102974](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102974.zip) The connection management of SL relay ZTE Corporation, Sanechips discussion Rel-17

[R2-2102975](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102975.zip) Discussion on system information paging and access control ZTE Corporation, Sanechips discussion Rel-17

[R2-2103087](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103087.zip) Connection management in L2 U2N relay Samsung discussion Rel-17

[R2-2103088](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103088.zip) System information delivery via relay UE Samsung discussion Rel-17

[R2-2103203](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103203.zip) UE to Network Relay Connection Establishment Futurewei discussion Rel-17

[R2-2103231](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103231.zip) RRC state transitions in L2 relaying Kyocera discussion Rel-17

[R2-2103310](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103310.zip) Support of idle mode mobility for remote-UE in SL UE-to-Nwk relay Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_SL\_relay R2-2101325

[R2-2103325](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103325.zip) RRC Connection Management for L2 relay vivo discussion Rel-17

[R2-2103326](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103326.zip) Control Plane procedure for L2 SL Relay vivo discussion Rel-17

[R2-2103328](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103328.zip) Discussions on L2 and L3 relay co-existence vivo discussion Rel-17

[R2-2103458](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103458.zip) Discussion on RRC procedures for U2N Relay ASUSTeK discussion Rel-17

[R2-2103482](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103482.zip) SIB Handling in Sidelink UE-to-Nwk Relay Nokia Germany discussion Rel-17 FS\_NR\_SL\_relay

[R2-2103662](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103662.zip) Discussion on control plane procedures for L2 sidelink relay Ericsson discussion Rel-17

[R2-2103663](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103663.zip) Discussion on service continuity for L2 sidelink relay Ericsson discussion Rel-17

[R2-2103718](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103718.zip) System information delivery for L2 U2N Relay CMCC discussion Rel-17 FS\_NR\_SL\_relay

[R2-2103738](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103738.zip) Control plane procedures for L2 U2N relaying Intel Corporation discussion Rel-17

[R2-2103742](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103742.zip) Monitoring Paging by a U2N Relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2103744](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103744.zip) SI acquisition, CN Registration and RNAU Lenovo, Motorola Mobility discussion

[R2-2103857](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103857.zip) Discussion on QoS mechanism for Layer 2 UE-to-NW relay Apple discussion

[R2-2103956](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103956.zip) Control plane multi-connectivity for NR Sidelink Relay UE AT&T discussion

[R2-2103996](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103996.zip) L2 relay QoS handling procedure LG Electronics Inc. discussion Rel-17

R2-2104126 Service continuity of L2 U2N relay Qualcomm communications-France discussion Late

[R2-2104131](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104131.zip) Discussion on the CP procedures for L2 Relay Huawei, HiSilicon discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104132](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104132.zip) Discussion on path switch for L2 UE to NW Relay Huawei, HiSilicon discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104245](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104245.zip) discussion on Paging and SI delivery for L2 U2N relay ETRI discussion Rel-17

#### 8.7.4.2 Protocol architecture

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

[R2-2102694](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102694.zip) Adaptation layer and E2E QoS handling of L2 U2N relay Qualcomm Incorporated discussion

[R2-2102702](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102702.zip) Study on the Adaption Layer for L2 U2N Relay CATT discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102781](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102781.zip) Adaptation layer for PC5 at L2 UE-to-Network Relay MediaTek Inc. discussion Rel-17

[R2-2102808](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102808.zip) Discussion on L2 Relay Architecture and QoS InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2102892](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102892.zip) Left issues on adaptation layer for L2 U2N Relay OPPO discussion Rel-17 Late

[R2-2102976](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102976.zip) Discussion on SL relay protocol architecture ZTE Corporation, Sanechips discussion Rel-17

[R2-2103002](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103002.zip) UP aspects for Layer 2 SL relay Ericsson discussion Rel-17

[R2-2103235](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103235.zip) Discussion on L2 Relay Architecture and QoS Spreadtrum Communications discussion Rel-17

[R2-2103327](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103327.zip) Adaptation Layer for L2 SL Relay vivo discussion Rel-17

[R2-2103459](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103459.zip) Discussion on presence of adaptation layer header for U2N Relay ASUSTeK discussion Rel-17

[R2-2103494](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103494.zip) Adaptation layer functionalities for L2 U2N relay Huawei, HiSilicon discussion Rel-17

[R2-2103514](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103514.zip) Adaptation layer and other protocol stack aspects for L2 relaying Samsung Electronics GmbH discussion

[R2-2103719](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103719.zip) PC5 adaption layer for L2 U2N relay CMCC discussion Rel-17 FS\_NR\_SL\_relay

[R2-2103720](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103720.zip) Consideration on Uu adaption layer CMCC discussion Rel-17 FS\_NR\_SL\_relay

[R2-2103737](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103737.zip) Adaptation layer design for L2 U2N relaying Intel Corporation discussion Rel-17

## 8.8 RAN slicing

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

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2 threads

### 8.8.1 Organizational

Rapporteur input

[R2-2103647](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103647.zip) SMBR enforcement in RAN Ericsson discussion Rel-17

[R2-2103694](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103694.zip) Work Plan for RAN Slicing WI CMCC Work Plan Rel-17

### 8.8.2 Cell reselection

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

[R2-2102696](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102696.zip) Slice specific cell reselection Qualcomm Incorporated discussion

[R2-2102762](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102762.zip) Considerations on slice based cell reselection Beijing Xiaomi Software Tech discussion Rel-17

[R2-2102773](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102773.zip) Considerations on contents of slice based reselection KDDI Corporation discussion Rel-17

[R2-2102831](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102831.zip) slice specific cell reselection Intel Corporation discussion Rel-17

[R2-2102988](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102988.zip) Considerations on slice-based cell reselection Lenovo, Motorola Mobility discussion Rel-17

[R2-2103159](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103159.zip) Discussion on slice based cell reselection China Telecommunication discussion Rel-17

[R2-2103213](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103213.zip) Consideration on slice-specific cell reselection OPPO discussion Rel-17

[R2-2103239](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103239.zip) Discussion on slice based cell reselection Spreadtrum Communications discussion Rel-17

[R2-2103269](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103269.zip) Cell (re)selection for RAN slicing Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103375](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103375.zip) Slice based cell reselection vivo discussion Rel-17

[R2-2103589](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103589.zip) Slice based Cell Reselection Sony Europe B.V. discussion Rel-17

[R2-2103621](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103621.zip) Discussion on slice based cell reselection LG Electronics UK discussion Rel-17

[R2-2103646](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103646.zip) On solution for RAN slicing enhancement Ericsson discussion Rel-17

[R2-2103668](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103668.zip) Slice-based cell reselection information Nokia, Nokia Shanghai Bell discussion Rel-17

[R2-2103695](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103695.zip) Discussion on slice based cell reselection CMCC discussion Rel-17

[R2-2103745](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103745.zip) Slice-specific system information for cell reselection Google Inc. discussion Rel-17

[R2-2103881](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103881.zip) Discussion on slice based cell reselection Apple discussion Rel-17

[R2-2103961](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103961.zip) System information contents for slice-aware cell reselection Sharp discussion Rel-17

[R2-2104004](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104004.zip) Discussion on slice based cell reselection under network control Huawei, HiSilicon discussion Rel-17

[R2-2104032](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104032.zip) Discussion on slice based Cell Reselection CATT discussion

[R2-2104063](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104063.zip) Discussion on slice-aware cell reselection ZTE corporation, Sanechips discussion Rel-17

[R2-2104176](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104176.zip) Discussion on slice based cell reselection Samsung Electronics Co., Ltd discussion Rel-17

### 8.8.3 RACH

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

[R2-2102697](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102697.zip) Slice specific RACH Qualcomm Incorporated discussion

[R2-2102761](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102761.zip) Considerations on slice based RACH configuration Beijing Xiaomi Software Tech discussion Rel-17

[R2-2102832](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102832.zip) Considerations of slice based RACH Intel Corporation discussion Rel-17

[R2-2102989](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102989.zip) Considerations on slice-based PRACH configuration Lenovo, Motorola Mobility discussion Rel-17

[R2-2103089](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103089.zip) Slice based RACH configuration Samsung discussion Rel-17

[R2-2103214](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103214.zip) Consideration on slice-specific RACH OPPO discussion Rel-17

[R2-2103240](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103240.zip) Consideration on slice based RACH configuration Spreadtrum Communications discussion Rel-17

[R2-2103376](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103376.zip) Slice based RACH configuration vivo discussion Rel-17

[R2-2103548](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103548.zip) RACH prioritisation for slices Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_slice

[R2-2103696](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103696.zip) Discussion on slice based RACH configuration CMCC discussion Rel-17

[R2-2103882](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103882.zip) Discussion on slice based RACH Apple discussion Rel-17

[R2-2104005](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104005.zip) Discussion on slice based RACH configuration Huawei, HiSilicon discussion Rel-17

[R2-2104019](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104019.zip) Analysis on slice based RACH configuration CATT discussion

[R2-2104064](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104064.zip) Discussion on slice specific RACH resources and RACH prioritization ZTE corporation, Sanechips discussion Rel-17

[R2-2104099](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104099.zip) Slice-specific RA procedure LG Electronics UK discussion

## 8.9 UE Power Saving

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

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 threads

### 8.9.1 Organizational Scope and Requirements

E.g. Rapporteur input

[R2-2102621](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102621.zip) Reply LS on Paging Enhancement (R1-2102136; contact: MediaTek) RAN1 LS in Rel-17 NR\_UE\_pow\_sav\_enh-Core To:RAN2

* Noted

DISCUSSION on Reply LS

- Chair wonder what we need to decide, e.g. number of subgroups.

- MTK think no of subgroups would be good.

- Ericsson think we need also an LS to SA2, think R1 is less impacted.

- Ericsson think we might need to decide whether this applies to PDCCH or PEI or both? MTK think the LS doesn’t say. Chair not sure R2 should decide. QC think R2 can develop an opinion whether this is useful or not. Vivo think PEI design is in R1 think PEI/PDCCH etc is a R1 issue. Apple think this is R1 scope. Think we can indicate agreements on preference on no of subgroups.

- CATT also think we should focus on the no of subgropus.

- Fraunhofer agrees we should have a pref no of groups.

- xiaomi think no of groups may depend on the solution.

- MTK think we can discuss min/max pref.

* Short Post email discussion, agree preference of no of groups if possible, approved reply LS out.
* [Post113bis-e][055][ePowSav] Reply LS on Paging Enhancement (Mediatek)

Scope: On Reply LS to RAN1, agree R2 preference for no of groups if possible to reply to R1 LS. Inforn on R2 progress

Intended outcome: Approved LS out

Deadline: Short

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

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

[R2-2104496](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104496.zip) Summary of Idle/Inactive-mode UE Power Saving (AI 8.9.2) MediaTek Inc. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

* Noted

[R2-2102919](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102919.zip) UE sub-grouping mechanism with Paging Enhancement CATT discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

- CATT think that network controlled grouping is complex, need to decide if RAN or CN may add the need to discuss e.g. UE Assisitance, and this would be dep on method.

- CATT think the gain of network controlled grouping has not been shown and seems to be small.

* Noted

[R2-2103258](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103258.zip) Paging Enhancement with UE Grouping MediaTek Inc., CMCC discussion

- Shows that is UEs are selected acc to paging prob / power sensisitivty, UE group can give additional power saving to random grouping.

- Think the network aready have the information needed to group UEs.

- vivo think that if smartphone and Iot devices has differnet number of UEs less than 5% power saving gain could be achieved by network controlled subgrouping.

* Noted

DISCUSSION

Q: Shall we have network controlled subgrouping (based on individual UE characteristics) or not?

- ZTE wonde how many UE characteristics shall be supported. Think we need to know this before deciding. ZTE would like to just reuse the paging probability.

- LG think the network doesn’t have more information than the UE, and power sensisitivty is known by the UE. LG think that UE shall determine its pging subgrouping.

- OPPO think network assigned subgrouping will require work, think UE-ID should be the baseline. QC also think we should have UE-ID as baseline.

- Ericsson believes that the PEI and cross-slot scheduling gives the most power saving. Slight preference for simple, can be ok with a CN controlled solution if grouping criterion left to impl.

- Intel support the network control subgrouping, with a network impl approach and think this makes it future-proof.

- CMCC think the motivation is important, and think we have a variety of UEs, and UEs that are rarly paged, and prefer network controlled subgrouping.

- Xiaomi agrees with CATT, think subgrouping shall be simple. Think it could be acceptable to reuse NB-ioT mechanism.

- Samsung think the gain of subgrouping is limited and not really preferred (prefer UE ID) but if agreed, would be ok with network assigning the grouping.

- Convida also think that Pei and cross-slot scheduling gives the most gain, but think that the netwok can indeed provide some bias.

- Apple support network controlled subgrouping and agres that there are beenfits as show by MTK CMCC.

- Nokia think there are differnet flavours of network grouping and prefer UEID only.

- IDT agrees with CATT and NOKIA.

- Sony support CN based subgrouping, and that additional assistance information can be easily provided if needed. Sony think that randomization is what we already have and there is no additional benefit over what we already have, and the network already have the information. Think not so complicated. Could be up to network to spread the load in differnet ways.

- Huawei think UE ID based doesn’t give sufficient benefit. UEs that are paged infrequently need the enhancement.

- Lenovo think we can consider the NB-IoT method, with restriction that we linmit to Paging probability.

- Huawei clarifies that the NB-IoT approach is network controlled with a UE suggestion (optional) to the network.

- CATT think the MTK/CMCC contribution shows that there is very limited gain for corner cases.

- MTK think NR should not be worse than LTE.

- Oppo wonder if the network doesn’t assign group will we then use UE-ID. Chair think EUTRA uses both. ZTE think that network vcontrlled grouping is on top of network controlled subgrouping. Oppo think there should be an option for no network grouping configuration. Nokia agrees. QC could agree.

- Ericsson think a) is a lot more work and not clear.

- xiaomi think that in NB-IoT if there is no subgrouping the UE is assigned to a default subgrop

First Indicative Show of Hands

a) Network controlled subgrouping (based on individual UE characteristics, not specified or limited to paging prob as EUTRA, possibly with additional randomization)

Support/prefer: 12 Companies Object: No objections

b) No network controlled subgrouping, just randomization.

Support/prefer: 10 Companies Chair assumes no objections as this is simpler.

Indicative Show of Hands for details on a)

Option a) sub-options, criterion for subgrouping:

A1: Paging Probability (Only, specified to be exactly that)

A2: Non Specific (leave to network, can include paging probability, IoT UEs / smartphone etc, may have assistance info from UE or other network node ).

Preference: A1: 4 Companies

Preference: A2: 17 Companies

Option a) sub-options, Network node:

A3: Core Network

A4: RAN

Preference: A3: 12 companies

Preference: A4: 8 companies

* If we go for network controlled subgrouping, If the network chooses to not provide specific subgrouping information, there will be configuration option where subgrouping can be supported by randomization (by UE-ID).

Chair: will invite for another show of hands between a) and b) in CB session. Decide between a) and b) based on simple majority. CB can also consider reply to R1 e.g. on no subgoups.

**CB session**

**Second Indicative Show of Hands**

a) Network controlled subgrouping (based on individual UE characteristics, not specified or limited to paging prob as EUTRA, possibly with additional randomization)

Prefer: 18 companies

b) No network controlled subgrouping, just randomization.

Prefer: 11 companies

DISCUSSION

- Ericsson think that with a) we don’t know what this is yes, e.g. whether we go for RAN or CN.

- Oppo wonder if the above agreement would still apply. Chair think yes.

* We adopt Network controlled subgrouping (based on individual UE characteristics, not specified or limited to paging prob as EUTRA, possibly with additional randomization)

[R2-2102680](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102680.zip) UE subgroup for paging reception Qualcomm Incorporated discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102704](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102704.zip) Paging Enhancements\_UE Grouping Samsung Electronics Co., Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102733](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102733.zip) Discussion on grouping-based paging OPPO discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102856](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102856.zip) Paging enhancement in idle inactive mode for power saving vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102865](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102865.zip) Network assigned subgrouping Intel Corporation discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102871](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102871.zip) Procedure details for Network assigned subgrouping Intel Corporation discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103149](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103149.zip) Discussion on UE subgroup for paging Xiaomi Communications discussion Rel-17

[R2-2103363](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103363.zip) UE subgrouping for paging enhancement LG Electronics Inc. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103369](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103369.zip) Details on paging sub-grouping determination Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103396](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103396.zip) Consideration on Idle/inactive-mode UE power saving Lenovo, Motorola Mobility discussion Rel-17

[R2-2103443](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103443.zip) Further discussion on UE grouping ZTE Corporation, Sanechips discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103585](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103585.zip) Discussion on the UE grouping mechanism Huawei, HiSilicon discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103591](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103591.zip) Discussion on enhancements for idle/inactive-mode UE power saving Sony Europe B.V. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103724](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103724.zip) Considerations on paging subgrouping CMCC discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103772](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103772.zip) Grouping methods for Paging Ericsson discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103833](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103833.zip) NR UE Power Save IDLE/INACTIVE Paging Grouping Schemes Apple discussion NR\_UE\_pow\_sav\_enh-Core

[R2-2103975](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103975.zip) UE grouping paging enhancement InterDigital discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103368](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103368.zip) Details on paging sub-grouping indication Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103773](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103773.zip) Group info signaled via Paging PDCCH Ericsson discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103960](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103960.zip) Enhancement to paging reception with cross-slot scheduling Qualcomm Incorporated discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103266](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103266.zip) Discussion on indications for UE power saving Asia Pacific Telecom co. Ltd, FGI discussion

other

[R2-2102705](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102705.zip) Paging Enhancements\_DRX cycle for monitoring paging Samsung Electronics Co., Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103587](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103587.zip) Discussion on other paging enhancements Huawei, HiSilicon discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

LS out

[R2-2103259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103259.zip) [Draft] Reply LS on UE Sub-grouping for Paging Enhancement MediaTek Inc. LS out To:RAN1, SA2

[R2-2104163](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104163.zip) draft LS on Paging Enhancement for UE power saving LG Electronics Inc. LS out Rel-17 NR\_UE\_pow\_sav\_enh-Core To:RAN1

### 8.9.3 Other aspects RAN2 impacts

TRS CSI-RS for UEs in Idle and Inactive

Postpone awaiting more progress in RAN1?

[R2-2102706](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102706.zip) TRS\_CSIRS for RRC IDLE and RRC INACTIVE Samsung Electronics Co., Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102863](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102863.zip) Discussion on TRS CSI-RS for RRC-IDLE and RRC-INACTIVE State UE Xiaomi Communications discussion

[R2-2102864](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102864.zip) LS to RAN1 on TRS CSI-RS for RRC-IDLE and RRC-INACTIVE State UE Xiaomi Communications LS out Rel-17 NR\_UE\_pow\_sav\_enh-Core To:RAN1

[R2-2102867](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102867.zip) TRS/CSI-RS configuration for idle/inactive mode UE Intel Corporation discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103395](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103395.zip) TRS/CSI-RS configuration for Idle/inactive mode UE Lenovo, Motorola Mobility discussion Rel-17

[R2-2103442](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103442.zip) Futrther consideration on the CSI-RS/TRS for Idle/Inactive UE ZTE Coporation, Sanechips discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103496](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103496.zip) Potential TRS/CSI-RS occasion(s) Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103774](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103774.zip) TRS exposure to UEs in idle and inactive Ericsson discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2104157](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104157.zip) Further Considerations on Configuration of TRS/CRI-RS CATT discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2104278](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104278.zip) Considerations on TRS CSI-RS occasion(s) for idle inactive UE(s) CMCC discussion

[R2-2102734](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102734.zip) Discussion on signaling aspects of TRS/CSI-RS occasion(s) for idle/inactive UEs OPPO discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102857](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102857.zip) Discussion on TRS CSI-RS in idle inactive mode vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core R2-2100458

[R2-2103058](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103058.zip) TRS/CSI-RS configuration and enhancement to short message Qualcomm Incorporated discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103207](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103207.zip) TRS CSI-RS for idle and inactive mode UE SHARP Corporation discussion

[R2-2103586](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103586.zip) Discussion on potential TRS/CSI-RS Huawei, HiSilicon discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103596](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103596.zip) Discussion on TRS/CSI-RS configuration of idle/inactive-mode UEs Sony Europe B.V. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2103834](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103834.zip) NR UE Power Save TRS/CSI-RS Signaling for IDLE/INACTIVE UEs Apple discussion NR\_UE\_pow\_sav\_enh-Core

Other

[R2-2102735](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102735.zip) power saving enhancement for connected mode UE OPPO discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2102858](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102858.zip) RAN2 impact on RLM/BFD relaxation for power saving vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

Withdrawn

R2-2104277 Considerations on TRS CSI-RS occasion(s) for idle inactive UE(s) CMCC discussion Withdrawn

## 8.10 NR Non-Terrestrial Networks (NTN)

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

Time budget: 1.5 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 5 threads

### 8.10.1 Organizational

LSs, rapporteur inputs and other organizational documents. Rapporteur inputs and other pre-assigned documents in this AI do not count towards the tdoc limitation.

[R2-2102617](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102617.zip) Reply LS on AN-PDB and PER targets for satellite access (R1-2102074; contact: Qualcomm) RAN1 LS in Rel-17 NR\_NTN\_solutions, 5GSAT\_ARCH To:SA2, RAN2 Cc:RAN3

[R2-2103469](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103469.zip) NR\_NTN\_solutions work plan THALES Work Plan Rel-17 NR\_NTN\_solutions

[R2-2103627](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103627.zip) Discussion on decoupled cell ID Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103698](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103698.zip) DRAFT LS to RAN1 about PCI issue in NTN CMCC LS out Rel-17 NR\_NTN\_solutions-Core To:RAN1 Cc:RAN3,RAN4

[R2-2103829](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103829.zip) Stage-3 running RRC CR for NTN Rel-17 Ericsson draftCR Rel-17 38.331 16.4.1 NR\_NTN\_solutions-Core

[R2-2103969](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103969.zip) Stage 3 running CR 38.321 - RAN2#113bis-e InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104289](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104289.zip) Stage-3 running 304 CR for NTN ZTE corporation, Sanechips draftCR Rel-17 38.304 16.4.0 B NR\_NTN\_solutions-Core

### 8.10.2 User Plane

[R2-2103968](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103968.zip) MAC open issues - RAN2#113bis-e InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

#### 8.10.2.1 RACH aspects

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

[R2-2102738](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102738.zip) Discussion on the left RACH issues in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2102932](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102932.zip) Considerations on RACH procedure enhancements in NTN CAICT discussion

[R2-2103053](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103053.zip) Start offset for RAR window and contention resolution timer Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core R2-2100740

[R2-2103074](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103074.zip) Timing Compensation, 4-Step RA Enhancements, and RA Resource Selection for an NTN Samsung Research America discussion

[R2-2103261](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103261.zip) Triggering of UE-specific TA report Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103263](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103263.zip) BSR over 2-step RACH Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103406](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103406.zip) Considerations on TA pre-compensation capability for RACH in NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2103407](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103407.zip) Further clarification and consideration for RA type selection Lenovo, Motorola Mobility discussion Rel-17

[R2-2103460](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103460.zip) BSR over 2-step RA ASUSTeK discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103630](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103630.zip) Report of [POST113-e][106][NTN] MAC aspects (Huawei) Huawei, HiSilicon report Rel-17 NR\_NTN\_solutions-Core

[R2-2103951](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103951.zip) On Random Access in NTNs Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104141](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104141.zip) Discussion on RA type selection and TA report LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104146](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104146.zip) NTN 2-step RACH selection enhancements Convida Wireless discussion

[R2-2104190](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104190.zip) Consideration on Random Access and TA ZTE Corporation, Sanechips discussion Rel-17

#### 8.10.2.2 Other MAC aspects

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

[R2-2102739](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102739.zip) Discussion on HARQ impact in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2102823](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102823.zip) Round trip delay offset for configured grant timers MediaTek Inc. discussion R2-2100262

[R2-2102824](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102824.zip) On disabling uplink HARQ retransmission and associated LCP impacts MediaTek Inc. discussion R2-2100261

[R2-2102951](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102951.zip) Discussion on UL Scheduling Enhancements in NR NTN CATT discussion

[R2-2102952](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102952.zip) Discussion on HARQ Aspects in NTN CATT discussion

[R2-2103054](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103054.zip) Support of dynamic disabling of UL HARQ retransmission Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core R2-2100741

[R2-2103075](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103075.zip) HARQ Stalling, RNTI Enhancements, Enhanced UL Scheduling, and Logical Channel Prioritization for an NTN Samsung Research America discussion

[R2-2103175](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103175.zip) HARQ related issues Beijing Xiaomi Mobile Software discussion Rel-17 R2-2100179

[R2-2103230](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103230.zip) On DRX and LCP impact for NTN Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103232](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103232.zip) Discussion on UL scheduling enhancements for NTN Nokia, Nokia Shanghai Bell discussion NR\_NTN\_solutions-Core

[R2-2103262](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103262.zip) HARQ retransmission schemes in NTN Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103445](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103445.zip) Co-existence issue of BSR over CG and BSR over 2-step RACH PANASONIC R&D Center Germany discussion

[R2-2103446](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103446.zip) DRX impact of disabling HARQ feedback and uplink retransmission PANASONIC R&D Center Germany discussion

[R2-2103599](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103599.zip) Other MAC enhancements in NTN Sony Europe B.V. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103629](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103629.zip) Further consideration on HARQ and LCP in NTN Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103725](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103725.zip) Left Issues for HARQ operation in NTN CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103826](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103826.zip) TA Adjustment in RRC\_CONNECTED state NEC Telecom MODUS Ltd. discussion

[R2-2103839](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103839.zip) Considerations for RA Type and TA Timer MAC Enhancements in Non Terrestrial Networks Apple discussion NR\_NTN\_solutions-Core

[R2-2103950](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103950.zip) On scheduling, HARQ, and DRX for NTNs Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103967](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103967.zip) UL HARQ RTT timer in NTN InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104038](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104038.zip) Discussion on MAC timers about UL scheduling in NTN CAICT discussion

[R2-2104144](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104144.zip) Discussion on UL scheulding and UL retranmission LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104191](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104191.zip) Consideration on HARQ aspects ZTE Corporation, Sanechips discussion Rel-17

#### 8.10.2.3 RLC and PDCP aspects

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

[R2-2103827](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103827.zip) RLC t-Reassembly timer configuration NEC Telecom MODUS Ltd. discussion

[R2-2103964](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103964.zip) On RLC t-Reassembly for NTN Sequans Communications discussion Rel-17 NR\_NTN\_solutions-Core R2-2101518

[R2-2104286](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104286.zip) Report of [POST113-e][107][NTN] RLC and PDCP Aspects (Samsung) Samsung discussion

### 8.10.3 Control Plane

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

Including TAC update aspects

[R2-2102740](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102740.zip) Discussion on TAC update OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2102990](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102990.zip) Issues on the TAC update due to satellite movement PANASONIC R&D Center Germany discussion

[R2-2103008](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103008.zip) Signalling Solution for Feeder Link Switching of NTN VODAFONE Group Plc discussion

[R2-2103055](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103055.zip) TAC update procedure Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103076](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103076.zip) TAC Management and Neighbor Search in an NTN Samsung Research America discussion

[R2-2103134](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103134.zip) Discussion on TAC aspects for NTN Xiaomi discussion

[R2-2103244](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103244.zip) Discussion on TAC updating in NTN Spreadtrum Communications discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103307](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103307.zip) Contents of ephemeris including beam type information LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103334](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103334.zip) On Feeder Link Mobility in Transparent Satellite Payload Scenarios Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core R2-2100528

[R2-2103628](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103628.zip) Discussion on remaining issues on soft TAU Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103699](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103699.zip) Discussion on SI modification for TAC Update CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103747](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103747.zip) Aspects for Earth fixed and Earth moving beams for NTN Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103749](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103749.zip) Aspects concerning soft TAC switch Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

R2-2103836 Analysis of Mobility Management with Earth Fixed and Earth Moving Beams/Cells in NTN Networks Apple discussion NR\_NTN\_solutions-Core Late

[R2-2103912](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103912.zip) NR-NTN: Multi-TAI Broadcast Fraunhofer IIS, Fraunhofer HHI discussion

#### 8.10.3.2 Idle/Inactive mode

Idle/inactive mode specific issues.

Including cell selection/reselection & system information.

This agenda item maybe deprioritized during this meeting.

[R2-2102741](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102741.zip) Discussion on idle/inactive mode procedures in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2102825](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102825.zip) On Cell-Reselection in NR-NTN MediaTek Inc. discussion R2-2100260

[R2-2102826](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102826.zip) On Soft-switch based Tracking Area Updates in NR-NTN MediaTek Inc. discussion

[R2-2102953](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102953.zip) Leftover issues on IDLE and inactive mode CATT discussion

[R2-2103077](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103077.zip) Cell Reselection, System Information, and Paging Enhancements for an NTN Samsung Research America discussion

[R2-2103135](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103135.zip) Cell selection and reselection enhancements for NTN Xiaomi discussion

[R2-2103245](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103245.zip) Issues on cell selection and reselection in NTN Spreadtrum Communications discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103408](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103408.zip) Ephemeris provision and network type indication for NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2103461](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103461.zip) PLMN separation for NTN & TN ASUSTeK discussion Rel-17 NR\_NTN\_solutions-Core R2-2101755

[R2-2103597](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103597.zip) Idle mode enhancement in NTN Sony Europe B.V. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103631](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103631.zip) WF for cell reselection in NTN Huawei, HiSilicon, BT Plc, CAICT, China Telecom discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103837](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103837.zip) Cell Selection And Cell Reselection Solutions for Non Terrestrial Networks Apple, British Telecom discussion NR\_NTN\_solutions-Core

[R2-2103838](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103838.zip) Considerations on ephemeris database and parameter distribution to UEs in Non Terrestrial Networks Apple discussion NR\_NTN\_solutions-Core

[R2-2103965](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103965.zip) Cell reselection in NTN InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103966](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103966.zip) Ephemeris in NTN InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104066](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104066.zip) Further consideration on cell selection and reselection in NTN ZTE corporation, Sanechips discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104147](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104147.zip) NTN indication and idle mode enhancements Convida Wireless discussion

R2-2104148 NTN Cell Selection and Idle Mode Enhancements Convida Wireless discussion Withdrawn

[R2-2104149](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104149.zip) NTN Cell (re)selection and idle mode enhancements Convida Wireless discussion

[R2-2104210](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104210.zip) Understanding on the newly introduced Access Technology identifier for NTN ZTE corporation, Sanechips discussion Rel-17 NR\_NTN\_solutions-Core

#### 8.10.3.3 Connected mode

Connected mode specific issues.

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

[R2-2102742](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102742.zip) Discussion on mobility management for connected mode UE in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2102827](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102827.zip) Mobility for NTN-TN scenarios MediaTek Inc. discussion

[R2-2102866](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102866.zip) Report of [post113-e][108][NTN] SMTC and measurement gap Intel Corporation discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2102954](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102954.zip) Further discuss CHO solutions for NR NTN CATT discussion

[R2-2103056](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103056.zip) Configuration and execution of CHO Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core R2-2100744

[R2-2103057](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103057.zip) Multiple SMTC configurations Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103078](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103078.zip) Handover Enhancements for an NTN Samsung Research America discussion

[R2-2103181](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103181.zip) Discussion on conditional handover in NTN Xiaomi Communications discussion

[R2-2103182](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103182.zip) Discussion on measurement in NTN Xiaomi Communications discussion

[R2-2103308](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103308.zip) Connected mode enhancements in NTN LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103335](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103335.zip) On Connected mode mobility for NTN Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103336](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103336.zip) Post-[108][NTN] views on SMTC and measurement gaps Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core R2-2100530

[R2-2103356](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103356.zip) Discussion on updating the timing for SMTC and measurement gap configuration ITRI discussion NR\_NTN\_solutions-Core

[R2-2103362](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103362.zip) Measurement window enhancements for NTN cell LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103409](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103409.zip) Enhancement to measurement reporting in NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2103410](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103410.zip) CHO in NTN system Lenovo, Motorola Mobility discussion Rel-17

[R2-2103465](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103465.zip) Configuration of CHO in NTN China Telecom, Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103600](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103600.zip) Mobility management in NTN Sony Europe B.V. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103602](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103602.zip) Cell coverage spillage over multiple countries issue in NTN Sony Europe B.V. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103620](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103620.zip) Service continuity between NTN and TN Hughes/EchoStar discussion Rel-17 Withdrawn

[R2-2103632](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103632.zip) WF for CHO in NTN Huawei, HiSilicon, BT Plc, CAICT, CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103700](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103700.zip) Discussion on SMTC/Gap enhancements for NTN CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103701](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103701.zip) Consideration on signaling issues for mobility enhancements CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103702](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103702.zip) Discussion on service continuity between NTN and TN CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2103751](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103751.zip) Connected mode aspects for NTN Ericsson discussion NR\_NTN\_solutions-Core

[R2-2103825](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103825.zip) Discussion on CHO for NTN NEC Telecom MODUS Ltd. discussion

[R2-2103976](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103976.zip) Service continuity between NTN and TN Hughes/EchoStar, Thales, BT Plc, Turkcell, Vodafone, ESA, Inmarsat discussion Rel-17

[R2-2104065](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104065.zip) Further consideration on CHO in NTN ZTE corporation, Sanechips discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104145](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104145.zip) SMTC and MG configuration for NTN Convida Wireless discussion

[R2-2104153](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104153.zip) NTN ANR enhancements Convida Wireless discussion

[R2-2104200](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104200.zip) Measurement enhancement for NTN ETRI 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.

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

[R2-2102955](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102955.zip) Discussion on network selection impact on LCS CATT discussion

## 8.11 NR positioning enhancements

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

Time budget: 1.5 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 5-6 threads

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

### 8.11.1 Organizational

Rapporteur input. Incoming LS etc. This AI is reserved for rapporteur and organizational inputs; documents in this AI do not count towards the tdoc limitation.

[R2-2102665](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102665.zip) LS on Scheduling Location in Advance to reduce Latency (S2-2102048; contact: Qualcomm) SA2 LS in Rel-17 5G\_eLCS\_ph2 To:RAN1, RAN2 Cc:RAN3

[R2-2102959](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102959.zip) Work plan on Rel-17 positioning Work item Intel Corporation, CATT, Ericsson discussion Rel-17 NR\_pos\_enh

### 8.11.2 Latency

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

[R2-2102789](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102789.zip) Discussion on latency enhancement for R17 positioning vivo discussion FS\_NR\_pos\_enh

[R2-2102849](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102849.zip) Consideration on latency reduction solutions Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2102925](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102925.zip) Consideration on Latency Optimization of Assistance Data CATT discussion Rel-17 NR\_pos\_enh

[R2-2103131](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103131.zip) Positioning enhancements on latency reduction Xiaomi discussion

[R2-2103144](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103144.zip) Consideration of the latency reduction regarding the scheduling the localization in advance OPPO discussion Rel-17

[R2-2103382](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103382.zip) Positioning Latency Reduction Enhancements Lenovo, Motorola Mobility discussion Rel-17

[R2-2103541](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103541.zip) Discussion on positioning latency Huawei, HiSilicon discussion Rel-17

[R2-2103614](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103614.zip) Considerations on positioning latency Sony Europe B.V. discussion Rel-17

[R2-2103785](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103785.zip) Enhancements for Latency Reduction InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2103898](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103898.zip) Scheduling Location in Advance to reduce Latency Qualcomm Incorporated discussion

[R2-2103899](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103899.zip) [draft] Response LS on Scheduling Location in Advance to reduce Latency Qualcomm Incorporated LS out To:SA2 Cc:RAN1, RAN3

[R2-2103914](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103914.zip) Reducing Latency for Positioning procedures Ericsson discussion

[R2-2104179](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104179.zip) Latency reduction via configured grant for positioning Samsung R&D Institute UK discussion

[R2-2104181](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104181.zip) Latency reduction via measurement gap signalling optimization Samsung R&D Institute UK discussion

[R2-2104274](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104274.zip) Disucssion on latency reduction ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2104275](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104275.zip) Discussion on preiodic PRS measurement ZTE Corporation, Sanechips 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.

[R2-2102788](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102788.zip) Discussion DL positioning support in RRC\_INACTIVE states vivo discussion FS\_NR\_pos\_enh Withdrawn

[R2-2102798](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102798.zip) Discussion on DL Positioning methods in RRC\_INACTIVE state OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2102799](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102799.zip) Discussion on UL Positioning methods in RRC\_INACTIVE state OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2102850](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102850.zip) Support of Positioning in RRC\_INACTIVE Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2102926](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102926.zip) Considerations on Positioning for UEs in RRC\_INACTIVE state CATT discussion Rel-17 NR\_pos\_enh

[R2-2103130](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103130.zip) Positioning enhancements on RRC Inactive UE Xiaomi discussion

[R2-2103383](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103383.zip) On Positioning in RRC\_INACTIVE state Lenovo, Motorola Mobility discussion Rel-17

[R2-2103537](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103537.zip) Discussion on positioning in RRC INACTIVE state Huawei, HiSilicon discussion Rel-17

R2-2103611 Considerations on positioning RRC Inactive Sony Europe B.V. discussion Rel-17 Late

[R2-2103612](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103612.zip) Considerations on positioning RRC Inactive Sony Europe B.V. discussion Rel-17

[R2-2103786](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103786.zip) Positioning in RRC INACTIVE state InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2103900](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103900.zip) Positioning of UEs in RRC Inactive State Qualcomm Incorporated discussion

[R2-2103915](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103915.zip) On Usage of SDT for Positioning Ericsson discussion

[R2-2103997](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103997.zip) Considerations on positioning in RRC\_INACTIVE Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2104129](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104129.zip) UL and DL+UL NR positioning methods vivo Mobile Communication Co., discussion

[R2-2104183](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104183.zip) Support of positioning result reporting in Inactive state Samsung R&D Institute UK discussion

[R2-2104272](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104272.zip) Discussion on DL INACTIVE positioning ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

R2-2104280 Discussion DL positioning support in RRC\_INACTIVE states vivo Mobile Communication Co., discussion Withdrawn

[R2-2104282](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104282.zip) Discussion DL positioning support in RRC\_INACTIVE states vivo Mobile Communication Co., discussion

### 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

[R2-2102790](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102790.zip) discuss on-demand PRS vivo discussion FS\_NR\_pos\_enh

[R2-2102797](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102797.zip) Discussion on on-demand DL-PRS OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2102851](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102851.zip) On-Demand PRS transmission Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2102927](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102927.zip) Discussion on on-demand PRS CATT discussion Rel-17 NR\_pos\_enh

[R2-2103132](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103132.zip) Discussion on on-demand DL PRS procedure Xiaomi discussion

[R2-2103250](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103250.zip) Discussion on the enhancements of on-demand PRS Spreadtrum Communications discussion Rel-17

[R2-2103384](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103384.zip) On-Demand DL-PRS Support Lenovo, Motorola Mobility discussion Rel-17

[R2-2103538](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103538.zip) Discussion on on-demand PRS Huawei, HiSilicon discussion Rel-17

R2-2103542 Summary of AI 8.11.4 for on-demand PRS Huawei, HiSilicon discussion Rel-17 Late

[R2-2103564](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103564.zip) On-demand PRS Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2103613](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103613.zip) Considerations on positioning PRS On-demand Sony Europe B.V. discussion Rel-17

[R2-2103787](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103787.zip) Procedures for On-demand PRS InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2103858](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103858.zip) Discussion on the signaling support for on-demand PRS Apple discussion

[R2-2103901](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103901.zip) On-demand PRS Qualcomm Incorporated discussion

[R2-2103916](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103916.zip) On demand PRS for energy savings Ericsson discussion

[R2-2103998](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103998.zip) On-demand PRS transmission considerations Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2103999](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103999.zip) Latency enhancement to on-demand PRS functionality Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2104142](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104142.zip) UE-initiated requests for on-demand PRS Convida Wireless discussion

[R2-2104184](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104184.zip) Support of on-demand DL PRS for positioning efficiency Samsung R&D Institute UK discussion

[R2-2104276](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104276.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

[R2-2102787](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102787.zip) Discussion on methodologies for network-assisted and UE-assisted integrity vivo discussion FS\_NR\_pos\_enh

[R2-2102928](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102928.zip) Discussion on signalling and procedures to support GNSS positioning integrity CATT discussion Rel-17 NR\_pos\_enh

[R2-2102994](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102994.zip) Signalling and Procedures for Positioning Integrity Support Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh

[R2-2103133](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103133.zip) Discussion on signalling and procedures for GNSS positioning integrity Xiaomi discussion

[R2-2103145](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103145.zip) Introduction of positioning integrity related timer OPPO discussion Rel-17

[R2-2103539](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103539.zip) Discussion on network-assisted and UE-assisted integrity Huawei, HiSilicon discussion Rel-17

[R2-2103567](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103567.zip) UE-aided detection of threat to GNSS systems and assistance data signalling Fraunhofer IIS, Fraunhofer HHI discussion

[R2-2103750](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103750.zip) Guiding framework on integrity concepts for A-GNSS positioning ESA discussion Rel-17 NR\_pos\_enh

[R2-2103788](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103788.zip) Procedures for GNSS positioning integrity InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2103917](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103917.zip) GNSS Integrity aspects of GNSS local environment and UE feared events Ericsson discussion

[R2-2103954](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103954.zip) Considerations on Positioning Integrity Determination Swift Navigation, Intel Corporation, Ericsson discussion

[R2-2104189](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104189.zip) Consideration on the signalling design for Positioning Integrity Samsung R&D Institute UK discussion

[R2-2104273](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104273.zip) Discussion on positioning integrity ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2104291](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104291.zip) Summary of 8.11.5 GNSS positioning integrity InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

### 8.11.6 Other

Input on other WI objectives.

[R2-2102929](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102929.zip) Discussion on Measurement Time Windows for accuracy improvement CATT discussion Rel-17 NR\_pos\_enh

[R2-2103540](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103540.zip) Discussion on R17 positioning enhancement Huawei, HiSilicon discussion Rel-17

[R2-2103789](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103789.zip) Positioning during mobility and in RRC INACTIVE InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2103902](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103902.zip) Signalling and Procedures for supporting Reference Location Devices Qualcomm Incorporated discussion

[R2-2103918](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103918.zip) On High Accuracy Aspects Ericsson discussion

## 8.12 Reduced Capability

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

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2-3 threads

### 8.12.1 Organizational

LSs, rapporteur inputs and other organizational documents. Rapporteur inputs and other pre-assigned documents in this AI do not count towards the tdoc limitation.

[R2-2102678](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102678.zip) LS on Unified Access Control (UAC) for RedCap (RP-210919; contact: Nokia) RAN LS in Rel-17 NR\_redcap To:SA1, CT1 Cc:RAN2

[R2-2102964](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102964.zip) RAN2 work plan for RedCap WI Ericsson discussion NR\_redcap-Core

### 8.12.2 Framework for reduced capabilities

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

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

[R2-2103249](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103249.zip) Discussion on L2 buffer size reduction for Redcap UE Spreadtrum Communications discussion Rel-17 NR\_redcap-Core

#### 8.12.2.2 Identification, access and camping restrictions

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

[R2-2102859](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102859.zip) Identification and access restrictions for RedCap UEs vivo, Guangdong Genius discussion Rel-17 FS\_NR\_redcap

[R2-2102947](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102947.zip) Camping restriction and cell selection criterion DENSO CORPORATION discussion Rel-17 NR\_redcap-Core

[R2-2103062](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103062.zip) Methods for barring and for capability reporting Sierra Wireless, S.A. discussion

[R2-2103279](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103279.zip) Access control for RedCap UEs Samsung discussion Rel-17 NR\_redcap-Core

[R2-2103506](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103506.zip) Early identification and SI indication NEC discussion Rel-17 NR\_redcap-Core

[R2-2103973](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103973.zip) Identification and restriction of RedCap UE InterDigital discussion Rel-17 NR\_redcap-Core

### 8.12.3 UE power saving and battery lifetime enhancement

#### 8.12.3.1 eDRX cycles

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

[R2-2102681](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102681.zip) Discussions on eDRX configuration Qualcomm Incorporated discussion Rel-17 FS\_NR\_redcap

[R2-2102736](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102736.zip) Discussion on eDRX for RedCap UEs OPPO discussion Rel-17 FS\_NR\_redcap

[R2-2102852](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102852.zip) Extend paging DRX for RedCap devices Intel Corporation discussion Rel-17 NR\_redcap

[R2-2102862](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102862.zip) Discussion on e-DRX for Redcap Devices Xiaomi Communications discussion

[R2-2102962](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102962.zip) Work on eDRX for RedCap UEs DENSO CORPORATION discussion Rel-17 NR\_redcap-Core

[R2-2102965](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102965.zip) Discussion of eDRX for RedCap Ericsson discussion NR\_redcap-Core

[R2-2103039](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103039.zip) Discussion on eDRX for RedCap UE ZTE Corporation, Sanechips discussion Rel-17 FS\_NR\_redcap

[R2-2103112](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103112.zip) Discussion On eDRX for NR RRC Inactive and Idle CATT discussion Rel-17 NR\_redcap-Core

[R2-2103530](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103530.zip) eDRX for REDCAP Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

[R2-2103622](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103622.zip) eDRX for RedCap UEs in RRC\_IDLE/RRC\_INACTIVE LG Electronics UK discussion Rel-17

[R2-2103707](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103707.zip) Discussion on eDRX for RedCap CMCC discussion Rel-17 NR\_redcap-Core

[R2-2103783](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103783.zip) Further considerations for eDRX MediaTek Inc. discussion Rel-17 NR\_redcap-Core

[R2-2103887](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103887.zip) RedCap UE power-saving with 2.56 DRX cycle Apple discussion Rel-17

[R2-2104059](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104059.zip) eDRX for RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

#### 8.12.3.2 RRM relaxations

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

[R2-2102682](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102682.zip) RRM relaxation enhancements for stationary UEs Qualcomm Incorporated discussion Rel-17 FS\_NR\_redcap

[R2-2102737](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102737.zip) Discussion on RRM relax for RedCap UEs OPPO discussion Rel-17 FS\_NR\_redcap

[R2-2102853](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102853.zip) RRM measurement relaxation criteria for RedCap devices Intel Corporation discussion Rel-17 NR\_redcap

[R2-2102860](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102860.zip) Discussion on RRM relaxation criteria for neighboring cells vivo, Guangdong Genius discussion Rel-17 FS\_NR\_redcap

[R2-2102966](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102966.zip) Mechanisms for RRM relaxation for RedCap Ericsson discussion NR\_redcap-Core

[R2-2103038](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103038.zip) RRM relaxation for RedCap UE ZTE Corporation, Sanechips discussion Rel-17 FS\_NR\_redcap

[R2-2103113](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103113.zip) Discussion On RRM Relaxations CATT discussion Rel-17 NR\_redcap-Core

[R2-2103150](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103150.zip) Discussion on RRM relaxation for RedCap UE Xiaomi Communications discussion Rel-17

[R2-2103206](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103206.zip) RRM relaxation in RRC\_CONNECTED for RedCap UEs SHARP Corporation discussion

[R2-2103309](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103309.zip) RRM relaxation for RedCap devices LG Electronics Inc. discussion Rel-17 NR\_redcap-Core

[R2-2103402](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103402.zip) RRM relaxation for stationary UE with reduced capability Lenovo, Motorola Mobility discussion Rel-17

[R2-2103495](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103495.zip) On RRM relaxations for REDCAP Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

[R2-2103691](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103691.zip) Discussion on the RRM relaxation for RedCap Ues CMCC discussion Rel-17 NR\_redcap-Core

[R2-2103781](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103781.zip) Discussion on RRM Relaxation of REDCAP UE China Telecommunications discussion Rel-17

[R2-2103784](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103784.zip) On RRM relaxation for RedCap devices MediaTek Inc. discussion Rel-17 NR\_redcap-Core

[R2-2103888](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103888.zip) RRM relaxation down selection of options for RedCap Apple discussion Rel-17

[R2-2103974](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103974.zip) RRM relaxation for RedCap UE InterDigital discussion Rel-17 NR\_redcap-Core

[R2-2104060](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104060.zip) RRM measurement relaxation for RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2104081](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104081.zip) RRM relaxation criteria for RedCap devices Samsung discussion Rel-17

## 8.13 SON/MDT

(NR\_ENDC\_SON\_MDT\_enh-Core; leading WG: RAN3; REL-17; WID: RP-201281)

Time budget: 1 TU

Tdoc Limitation: 6 tdocs

Email max expectation: 6 threads

### 8.13.1 Organizational

[R2-2102629](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102629.zip) Reply LS on on energy efficiency (R3-207014; contact: Ericsson) RAN3 LS in Rel-17 NR\_ENDC\_SON\_MDT\_enh To:SA5 Cc:RAN2, SA

[R2-2102639](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102639.zip) LS on information needed for MRO in SCG Failure Report (R3-211332; contact: Samsung) RAN3 LS in Rel-17 NR\_ENDC\_SON\_MDT\_enh To:RAN2 Cc:-

[R2-2102640](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102640.zip) LS on the details of logging forms reported by the gNB-CU-CP, gNB-CU-UP and gNB-DU under measurement pollution conditions (R3-211334; contact: Ericsson) RAN3 LS in Rel-17 NR\_ENDC\_SON\_MDT\_enh To:SA5, RAN2 Cc:-

### 8.13.2 SON

#### 8.13.2.1 Handover related SON aspects

Including conditional handover and DAPS

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

[R2-2103065](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103065.zip) HO related SON changes QUALCOMM Incorportated discussion Rel-17

[R2-2103098](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103098.zip) Discussion on CHO and DAPS Aspect CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103142](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103142.zip) Further consideration on handover related SON OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103157](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103157.zip) Discussion on CHO configuration optimization aspects China Telecommunication discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103164](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103164.zip) Discussion on signalling and content of DAPS HO report vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103385](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103385.zip) SON Enhancements for CHO Lenovo, Motorola Mobility discussion Rel-17

[R2-2103386](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103386.zip) SON Enhancement for DAPS Handover Lenovo, Motorola Mobility discussion Rel-17

[R2-2103550](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103550.zip) Further clarifications on MRO Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103709](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103709.zip) Further consideration on SON Enhancement for CHO CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103710](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103710.zip) SON Enhancement for DAPS CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103731](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103731.zip) Discussion on handover related SON aspects Huawei, HiSilicon discussion Rel-17

[R2-2103933](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103933.zip) Introducing additional CHO related failure/ success info, including multiple event Samsung Telecommunications discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103944](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103944.zip) Handover-related SON aspects Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103945](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103945.zip) [Post113-e][851][NR17 SON/MDT] HO related SON changes (Ericsson) Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104045](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104045.zip) SON Enhancements for DAPS HO Samsung discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104070](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104070.zip) Discussion on RLF report for DAPS SHARP Corporation discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104192](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104192.zip) Remaining issues on RLF report enhancements ZTE Corporation, Sanechips discussion Rel-17

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

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

[R2-2103093](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103093.zip) Report of [Post113-e][852][NR17 SON/MDT] 2 step RA and other SON changes (CATT) CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core Late

[R2-2103094](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103094.zip) [Draft] Reply LS on RACH report for 2-step RACH CATT LS out Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core To:RAN3

[R2-2103165](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103165.zip) Discussion on signalling model of 2-step RACH report vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103421](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103421.zip) Discussion on 2-step RACH reporting in SON OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103551](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103551.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

[R2-2103711](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103711.zip) SON Enhancement for 2-step RA CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103732](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103732.zip) Discussion on 2 step RA related SON aspects Huawei, HiSilicon discussion Rel-17

[R2-2103942](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103942.zip) 2-Step RA information for SON purposes Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104055](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104055.zip) SON Enhancements for 2SRA Samsung discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104057](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104057.zip) Discussion on RA information for 2-step RA SHARP Corporation discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104193](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104193.zip) Remaining issues on RA related enhancements ZTE Corporation, Sanechips discussion Rel-17

[R2-2104292](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104292.zip) Summary of AI 8.13.2.2 CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

#### 8.13.2.3 Other WID related SON features

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

[R2-2103066](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103066.zip) NR-U Related Enhancements QUALCOMM Incorporated discussion Rel-17

[R2-2103095](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103095.zip) Solution for the UE RACH Report for SN CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103096](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103096.zip) Further Consideration on PSCell MHI CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103099](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103099.zip) On Successful HO Report CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103148](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103148.zip) Consideration on successful handover report and UE history information in EN-DC OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103298](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103298.zip) Discussion on signalling aspects of successful handover report NEC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103387](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103387.zip) MRO for Inter-RAT handover Lenovo, Motorola Mobility discussion Rel-17

[R2-2103388](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103388.zip) MRO for fast MCG link recovery Lenovo, Motorola Mobility discussion Rel-17

[R2-2103552](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103552.zip) Discussion on other SON aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103553](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103553.zip) MPE impact on MRO Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103712](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103712.zip) Discussion on Successful Handover Report CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103713](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103713.zip) Further consideration on UL-DL coverage mismatch CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103733](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103733.zip) Discussion on other SON aspects Huawei, HiSilicon discussion Rel-17

[R2-2103755](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103755.zip) Discussion on enhancement of RLF report NTT DOCOMO, INC. discussion Rel-17 Late

[R2-2103943](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103943.zip) Other WID related SON features Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104056](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104056.zip) SON Enhancements for Successful HO Report Samsung discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104058](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104058.zip) Other SON Enhancements Samsung discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104071](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104071.zip) Successful HO report in DAPS SHARP Corporation discussion

[R2-2104194](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104194.zip) Further considerations on successful HO report ZTE Corporation, Sanechips discussion Rel-17

[R2-2104195](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104195.zip) Consideration on RAN3 concerned issues ZTE Corporation, Sanechips discussion Rel-17

R2-2104296 Summary of AI 8.13.2.3 Other WID related SON features vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

### 8.13.3 MDT

#### 8.13.3.1 Immediate MDT enhancements

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

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

[R2-2103064](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103064.zip) On the accuracy of M5 and M7 measurements in split-bearer QUALCOMM Incorporated discussion Rel-17

[R2-2103100](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103100.zip) Further Consideration on Immediate MDT Enhancements CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103166](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103166.zip) Support of immediate MDT in MR-DC vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103810](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103810.zip) On Immediate MDT Enhancements Ericsson discussion

[R2-2103985](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103985.zip) D1 in Immediate MDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104006](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104006.zip) Report of [Post113-e][853][NR17 SON/MDT] IMM MDT Huawei report Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104007](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104007.zip) Discussion on immediate MDT enhancements Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104180](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104180.zip) Discussion on immediate MDT OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104295](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104295.zip) Summary of 8.13.3.1 Rel-17 Imm MDT Huawei discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

#### 8.13.3.2 Logged MDT enhancements

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

[R2-2103063](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103063.zip) Logged Measurement Enhancements QUALCOMM Incorporated discussion Rel-17

[R2-2103097](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103097.zip) MDT enhancements for On-demand SI CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103143](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103143.zip) Enhancements for logged MDT OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103501](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103501.zip) Discussion on recording SI related information OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103554](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103554.zip) Logged MDT in EN-DC and other enhancements Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103697](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103697.zip) MDT for slice unavailability CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103708](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103708.zip) Report of [Post113-e][854][NR17 SON MDT] Logged MDT CMCC report Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103811](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103811.zip) On logged MDT related enhancements Ericsson discussion

[R2-2103930](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103930.zip) R17 Logged MDT issues (overwrite, IRAT/ MR-DC, logging non camping freqs, IDC and OSI) Samsung Telecommunications discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104008](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104008.zip) Discussion on logged MDT enhancements Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2104196](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104196.zip) Remaining issues on logging of on-demand SI request information ZTE Corporation, Sanechips discussion Rel-17

[R2-2104197](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104197.zip) On support MDT in NPN ZTE Corporation, Sanechips discussion Rel-17

### 8.13.4 L2 Measurements

[R2-2103156](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103156.zip) Discussion on introduction of the UE DL PDCP packet average delay measurement China Telecommunication discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2103824](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103824.zip) On layer-2 measurements Ericsson discussion

[R2-2104009](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104009.zip) Discussion on L2M Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

## 8.14 NR QoE

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

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2 threads

### 8.14.1 Organizational

LS in. Rapporteur input.

Work Plan

[R2-2102760](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102760.zip) Workplan for Rel-17 NR QoE in RAN2 China Unicom, Ericsson Work Plan FS\_NR\_QoE

* Noted

LS in

[R2-2102633](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102633.zip) Conclusion of NR QoE Management and Optimizations for Diverse Services SI in RAN3 (R3-211234; contact: China Unicom) RAN3 LS in Rel-17 FS\_NR\_QoE To:RAN2, SA4, SA5 Cc:-

No action, taken into account in the WID.

* Noted

[R2-2102643](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102643.zip) Reply LS on QoE Measurement Collection for LTE (RP-210922; contact: Ericsson) RAN LS in Rel-17 FS\_NR\_QoE To:SA5, SA4 Cc:SA, RAN2, RAN3

No action, taken into account in the WID.

* Noted

### 8.14.2 QoE measurement collection NR standalone

Specify the support for QoE measurement collection in NR standalone mode. [RAN2, RAN3], including: configuration, activation, and deactivation procedures for both signalling-based and management-based QoE measurement collection and reporting, taking LTE QoE solutions as baseline, as defined in TR 38.890, Including determination of QoE measurement handling at RRC state transition/in RRC\_INACTIVE. including: support for multiple simultaneous QoE measurements at a UE, including: QoE measurement handling at RAN overload, including pause and resume of QoE measurement reporting.

Do not input to 8.12.2 but instead to 8.14.2.x

#### 8.14.2.1 Configuration architecture general aspect

[R2-2103049](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103049.zip) Configuration and reporting of QoE measurements Ericsson discussion

DISCUSSION

P1

- Oppo think MAC CE and QoE configuration ID could be used, since simultaneous measurements are to be used. Oppo think MAC CE is about activation / deactivation.

- Ericsson think MAC CE is not needed, we don’t need activte deactivate and QoE reference is used. Vivo agrees MAC CE is not needed. Also ZTE think RRC reconfiguration can be sued

P3

- ZTE think this is ok, and think we need to clarify how many service types can be configured per container, think 1 service type per container. Ericsson agrees. Intel think one RRC message can contain current service numbers.

- SS wonders if we mean configuration or release? Ericsson think that if we have a list for configuration we also need a list for release.

P4

- LG think this is dependent on whether we can have multiple measurements per service types.

- QC think this ref ID is anyway needed, and we should use this to link the measurement report.

- Huawei agrees we need some identifier. Whether we need to reuse the SA5 reference ID is not clear for this. Huawei think this is 4-5 bytes and this size is not needed. It can be stored in the gNB and used only in the network.

- CATT think R3 will decide this.

- Nokia think the QoE reference can be known to the network, and think the requirement for this over Uu is for Idle where the network doesn’t have a reference. Agree that QoE ref is needed, but not sure that the UE need to store this. Whehter needed for RRC is FFS.

- Intel agrees with P4

- ZTE think that according to LS request we need the reference both inside and outside th container.

- Ericsson think this is required for Idle mode.

- LG wonder if the reference ID is used in the UE and how.

P7

- Is then FFS as well

* Configure QoE measurements for NR in *RRCReconfiguration*.
* Add configuration of QoE measurements in *OtherConfig* in *RRCReconfiguration*.
* Add the configuration of QoE measurements by means of list to enable configuration of multiple simultaneous measurements.
* R2 assumes that for RRC an ID is required to identify a measurement, FFS whether this is the QoE reference ID or something else.
* Define SRB4 for transmission of QoE reports in NR.
* Define an RRC message *MeasReportAppLayer* for the transmission of QoE reports in NR.

[R2-2103555](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103555.zip) Considerations on QoE scope Nokia, Nokia Shanghai Bell discussion Rel-17

P1

- QC think that from UE point of view there is no difference between signalling based and mgmt. based, would like to postpone in R2 until R3 has had discussion.

- Huawei think P1 is stage-2 and in sceop of R2

P3

- ZTE think that for mgmt. based QoE this is ok. Think for signalling based we’d ned to discuss. Huawei support that RAN can release at any time. Ericsson support.

- LG has concerns about this for signalling based MDT

- QC support and think application layer shall be informed.

P4

- Ericsson think the UE can store, and UE can report later.

- Chair think several companies proposed as Ericsson, so we don’t agree this now postpone

P7/8

- QC think mobility to be discussed in R3. ZTE agrees.

- Ericsson support P7 but not P8

- Chair: We let Ran3 discuss handover first.

P9-12

- Chair: Postpone, RAN2 not to focus primarily on these aspects.

* RAN2 assumes that QoE support for NR includes (as the LTE framework): activation by Trace Function, both signalling and management-based configuration and RRC procedures supporting AppLayer config and report.
* From RAN2 point of view, the UE shall follow gNB commands and, NG-RAN can in principle release by RRC the application layer measurement configuration towards the UE at any time, e.g. if required due to load or other reasons (Note that other WGs are responsible to define the normal system procedures for release and which nodes are responsible etc).
* The UE Inactive AS context includes the UE AS configuration for the QoE (it is not released when UE goes to Inactive).

[R2-2102963](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102963.zip) QoE configuraiton and reporting general aspects Qualcomm Incorporated discussion

[R2-2103910](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103910.zip) Discussion on QoE measurement configuration and reporting Huawei, HiSilicon discussion Rel-17

[R2-2102958](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102958.zip) QoE measurement configuration and reporting Intel Corporation discussion Rel-17

[R2-2103147](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103147.zip) Discussion on QoE measurement collection in NR OPPO discussion Rel-17

[R2-2103377](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103377.zip) QoE measurement configuration and reporting vivo discussion Rel-17

[R2-2103425](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103425.zip) QoE measurements in NR LG Electronics Inc. discussion Rel-17

[R2-2103556](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103556.zip) QoE reporting control by RAN awareness on QoE parameter Nokia, Nokia Shanghai Bell discussion Rel-17

[R2-2103692](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103692.zip) Configuration and reporting for NR QoE measurement CMCC discussion Rel-17

[R2-2104034](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104034.zip) Discussion on NR QoE configuration CATT discussion

[R2-2104082](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104082.zip) Issues for NR QoE measurement Samsung discussion Rel-17

[R2-2104270](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104270.zip) Discussion on NR QoE Configuration ZTE Corporation, Sanechips discussion Rel-17

[R2-2103835](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103835.zip) Discussions on the QoE SI Metrics and Collection Procedures Apple discussion

[R2-2103934](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103934.zip) General framework for QoE measurements Samsung Telecommunications discussion

#### 8.14.2.2 Start and Stop

Activation Deactivation Pause Resume

[R2-2103911](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103911.zip) QoE measurement handling at RAN overload Huawei, HiSilicon discussion Rel-17

DISCUSSION

On P3 and P4

- QC support P3 and P4, and think we need to inform also SA4

- LG support P3. On P4 LG think that application should keep measureing even after Pause. Huawei agrees, and think application can continue and when resume the application layer can report.

- On P3 Oppo strongly prefer to use MAC CE.

- Ericsson support p3. On P4 don’t agree and think RAN2 should specify max time or volume. Nokia think P4 defines interaction between AS and application.

- Chair: There seems to be support for P3 but no time to finally conclude.

* Offline to gather comments on P4, progress if possible (Huawei)
* [AT113bis-e][037][eQoE] Pause Resume (Huawei)

Scope: Address the following questions: Whether measurement collection internally in the UE shall continue when Paused or not (i.e. whether only transmission of reports over Uu is actually paused). Assuming Yes, address the additional question whether handling of and specification of UE-collected-but-non-Uu-reported measurements should be in AS/RAN2 or Application/SA4/SA5

Intended outcome: Report

Deadline: Tuesday April 20 to come-back on-line.

[R2-2104627](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104627.zip) Report of offline discussion: [AT113bis-e][037][eQoE] Pause Resume Huawei, HiSilicon

DISCUSSION

P2

- ZTE think we can send LS to SA4 but need to check wording. Think Option 2 is the most popular in R2.

- QC also support to send LS, think majority view doesn’t need to be added. Would like to add technical concerns, think that buffer size in AS would be very small.

- Nokia think P2 should be about the three options, think it is premature to send LS to SA4. There is no joint WI with SA. Are not sure whether we want SA4 to decide for us right now.

- Lenovo doubt that SA4 will change any decisions.

- Intel think Sa4 and SA5 already have decided, so we don’t need to duplicate this. Samsung agrees with Intel.

- Chair: we don’t send an LS (now).

* “QoE pause” indication from the network is used to temporarily stop QoE reports from being sent from the UE to the network. Application layer behaviour upon UE receiving “pause/resume” indications is out of RAN2 scope.
* The following are options considered by RAN2 for QoE report handling during RAN overload via “QoE report pause indication”:

Option 1: Application layer is responsible for storing QoE reports when the UE receives QoE pause indication.

Option 2: AS layer is responsible for storing QoE reports when the UE receives QoE pause indication.

Option 3: The QoE container received from application layer is discarded during pause.

[R2-2102967](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102967.zip) Stop and start of QoE measurement reporting Qualcomm Incorporated discussion

[R2-2103050](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103050.zip) Pause and resume of QoE measurements Ericsson discussion

[R2-2103146](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103146.zip) Discussion on QoE measurement pausing and resuming OPPO discussion Rel-17

[R2-2103290](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103290.zip) LS reply on QoE Measurement Collection Qualcomm Incorporated LS out To:SA4, SA5, CT1 Cc:RAN3

[R2-2103378](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103378.zip) QoE measurement handling vivo discussion Rel-17

[R2-2103693](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103693.zip) Start and stop for NR QoE measurement CMCC discussion Rel-17

[R2-2104035](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104035.zip) Discussion on QoE collection start and stop CATT discussion

[R2-2104271](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104271.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: 4 tdocs

Email max expectation: 4 threads

### 8.15.1 Organizational

Including incoming LSs, rapporteur inputs, etc.

[R2-2102660](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102660.zip) Reply LS on geo-area confinement (S2-2101319; contact: LGE) SA2 LS in Rel-17 NR\_SL\_enh To:RAN2 Cc:-

### 8.15.2 SL DRX

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

[R2-2102688](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102688.zip) DRX Design for Sidelink Unicast CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2102689](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102689.zip) Further Study on DRX for Sidelink Groupcast/Broadcast CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2102690](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102690.zip) DRX Active Time Alignment between Uu and SL CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2102771](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102771.zip) Further discussion on Sidelink DRX LG Electronics France discussion NR\_SL\_enh-Core

[R2-2102801](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102801.zip) Summary of [POST113-e][703][V2X/SL] Details of Timer (InterDigital) InterDigital discussion Rel-17 NR\_SL\_enh-Core Late

[R2-2102802](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102802.zip) Further details on SL DRX Timers InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2102803](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102803.zip) On TX Centric vs RX Centric DRX Configuration Determination InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2102815](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102815.zip) SL DRX Configuration Impact on RAN1 and RAN2 vivo discussion

[R2-2102816](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102816.zip) SL DRX for Unicast vivo discussion

[R2-2102817](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102817.zip) SL DRX for Groupcast and Broadcast vivo discussion

[R2-2102848](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102848.zip) Discussion on SL DRX impact on SL resource allocation mode 1 Sharp discussion NR\_SL\_enh-Core

[R2-2102886](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102886.zip) Discussion on DRX configuration OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2102887](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102887.zip) Discussion on network involvement for SL related DRX OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2102888](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102888.zip) Left issues on DRX mechanisms and granularity OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2102889](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102889.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

[R2-2102971](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102971.zip) Discussion on sidelink DRX timer handling Xiaomi communications discussion

[R2-2102972](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102972.zip) DRX coordination between Uu and Sidelink Xiaomi communications discussion

[R2-2102973](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102973.zip) DRX coordination between TX and RX UE Xiaomi communications discussion

[R2-2102979](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102979.zip) Discussion on Coordination between Uu DRX and SL DRX ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2102980](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102980.zip) Discussion on sidelink DRX configuration for unicast ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2102981](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102981.zip) Discussion on sidelink DRX configuration for groupcast and broadcast ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2103003](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103003.zip) General aspects of SL DRX Ericsson,Qualcomm Incorporated discussion Rel-17 NR\_SL\_enh-Core

[R2-2103004](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103004.zip) Alignment between SL DRX and Uu DRX Ericsson,Qualcomm Incorporated discussion Rel-17 NR\_SL\_enh-Core

[R2-2103005](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103005.zip) Interaction between partial sensing and DRX Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2103011](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103011.zip) NR SL DRX Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2103068](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103068.zip) On general SL DRX design Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2103069](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103069.zip) Discussion on SL DRX timers Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2103070](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103070.zip) On DRX wake-up time alignment Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2103174](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103174.zip) Consideration on sidelink DRX for broadcast and groupcast Huawei, HiSilicon discussion

[R2-2103234](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103234.zip) Discussion on HARQ RTT and Retransmission Timers for SL Unicast Spreadtrum Communications discussion Rel-17 NR\_SL\_enh-Core

[R2-2103287](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103287.zip) Discussion on HARQ RTT and Retransmission Timer for SL DRX Fujitsu discussion Rel-17 NR\_SL\_enh-Core

[R2-2103288](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103288.zip) Alignment of sidelink DRX active time Fujitsu discussion Rel-17 NR\_SL\_enh-Core

[R2-2103305](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103305.zip) On the deciding entity of SL DRX configuration Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_enh-Core

[R2-2103306](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103306.zip) Backward Compatibility Issue of SL DRX with Rel.16 Sidelink Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_enh-Core R2-2101323

[R2-2103401](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103401.zip) SL DRX configuration for unicast Lenovo, Motorola Mobility discussion Rel-17

[R2-2103462](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103462.zip) Discussion on SL DRX active time for groupcast and broadcast ASUSTeK discussion Rel-17 NR\_SL\_enh-Core

[R2-2103463](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103463.zip) Discussion on MAC impact regarding Sidelink DRX ASUSTeK discussion Rel-17 NR\_SL\_enh-Core

[R2-2103468](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103468.zip) Geolocation for Sidelink DRX Nokia, Nokia Shanghai Bell, Fujitsu, Fraunhofer IIS, Fraunhofer HHI discussion Rel-17 NR\_SL\_enh-Core

[R2-2103470](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103470.zip) Coordination between Uu DRX and SL DRX Lenovo, Motorola Mobility discussion Rel-17 NR\_SL\_enh-Core R2-2100931

[R2-2103478](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103478.zip) SL DRX Timers Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_enh-Core

[R2-2103576](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103576.zip) On detailed SL DRX model MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core

[R2-2103577](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103577.zip) On coordination between Uu DRX and SL DRX MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core

[R2-2103615](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103615.zip) Discussion on Sidelink DRX Sony Europe B.V. discussion Rel-17 NR\_SL\_enh-Core

[R2-2103741](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103741.zip) DRX Configuration for Broadcast and Groupcast SL communication Lenovo, Motorola Mobility discussion Rel-17 NR\_SL\_enh-Core

[R2-2103778](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103778.zip) Discussion on Directional SL DRX for Unicast Qualcomm Finland RFFE Oy discussion Rel-17

[R2-2103779](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103779.zip) Discussion on SL DRX configuration for Groupcast & Broadcast Qualcomm Finland RFFE Oy discussion Rel-17

=> Revised in [R2-2104285](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104285.zip)

[R2-2104285](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104285.zip) Discussion on SL DRX configuration for Groupcast & Broadcast Qualcomm Finland RFFE Oy, Ericsson discussion Rel-17

[R2-2103780](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103780.zip) Discussion on SL DRX Timers and Others Qualcomm Finland RFFE Oy discussion Rel-17

[R2-2103852](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103852.zip) Discussion on remaining issues on SL DRX Apple discussion Rel-17 NR\_SL\_enh-Core

[R2-2103853](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103853.zip) Discussion on RX-centric and Tx-centric in SL unicast DRX Apple, InterDigital Inc. discussion Rel-17 NR\_SL\_enh-Core

[R2-2103889](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103889.zip) Coordination between DL DRX and SL DRX Samsung discussion

[R2-2103891](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103891.zip) SL DRX operation for groupcast/broadcast Samsung discussion

[R2-2103892](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103892.zip) Transmission UE behaviours for SL DRX Samsung discussion

R2-2103894 Rel-16 SCI information related to active time in SL DRX Samsung discussion Withdrawn

[R2-2103952](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103952.zip) SL DRX Granularity Considerations Convida Wireless discussion Rel-17

[R2-2104083](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104083.zip) Remaining issues in which UE decides sidelink DRX configurations LGE, InterDigital, Huawei, ASUSTeK, Apple discussion Rel-17 NR\_SL\_enh-Core

[R2-2104113](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104113.zip) Discussion on SL communication impact on Uu DRX Huawei, HiSilicon discussion

[R2-2104114](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104114.zip) Consideration on the sidelink DRX for unicast Huawei, HiSilicon discussion

[R2-2104256](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104256.zip) Consideration on sidelink DRX determination LG Electronics Inc. discussion Rel-17 NR\_SL\_enh-Core

[R2-2104266](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104266.zip) SL DRX enabled UE Mode 2 operation ITL discussion Rel-17

### 8.15.3 Resource allocation enhancements RAN2 scope

[R2-2102691](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102691.zip) Consideration on Resource Allocation Enhancements CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2102746](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102746.zip) Discussion on inter-UE coordination OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2102772](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102772.zip) Power efficient resource allocation LG Electronics France discussion NR\_SL\_enh-Core

[R2-2102804](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102804.zip) Resource Allocation for eSL InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2102818](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102818.zip) Discussion on inter-UE coordination for sidelink mode2 vivo discussion

[R2-2102970](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102970.zip) Resource allocation enhancement impact in RAN2 Xiaomi communications discussion

[R2-2102982](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102982.zip) Discussion on inter-UE coordination ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2103040](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103040.zip) Power Reduction for Sidelink Mode 2 Resource Allocation Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2103041](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103041.zip) Inter-UE Coordination for Sidelink Mode 2 Resource Allocation Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2103173](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103173.zip) On resource allocation enhancement in Rel-17 NR eSL Huawei, HiSilicon discussion

[R2-2103238](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103238.zip) Discussion on resource allocation enhancement for NR sidelink Spreadtrum Communications discussion Rel-17 NR\_SL\_enh-Core

[R2-2103289](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103289.zip) Dual-mode Configuration and Selection for NR Sidelink Fujitsu discussion Rel-17 NR\_SL\_enh-Core

[R2-2103400](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103400.zip) Discussion on sidelink resource allocation enhancements Lenovo, Motorola Mobility discussion Rel-17

[R2-2103578](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103578.zip) Transmission of assistance information for Mode 2 enhancement MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core R2-2101647

[R2-2103617](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103617.zip) Discusison on Sidelink sensing Sony Europe B.V. discussion Rel-17 NR\_SL\_enh-Core

[R2-2103664](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103664.zip) General principles for resource allocation enhancements for SL mode 2 Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2103736](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103736.zip) Resource Allocation Enhancements Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2103854](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103854.zip) Discussion on Inter-UE Coordination Apple discussion NR\_SL\_enh-Core

[R2-2103855](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103855.zip) Discussion on resource allocation for Pedestrian UE Apple discussion NR\_SL\_enh-Core

[R2-2103948](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103948.zip) On Resource Allocation Mode 2 Enhancement for NR Sidelink Convida Wireless discussion Rel-17 R2-2101650

[R2-2103988](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103988.zip) Resource allocation enhancements Samsung discussion

[R2-2104085](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104085.zip) Inter-UE coordination for NR V2X LG Electronics Inc. discussion Rel-17 NR\_SL\_enh-Core

### 8.15.4 Other

[R2-2102805](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102805.zip) Discussion on Uu DRX for SL UE InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2103579](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103579.zip) On SL sync search optimization MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core R2-2101648

## 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

[R2-2103592](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103592.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

* Noted

Draft CR

R2-2103595 Stage 2 specification for NPN enhancements Nokia (Rapporteur) draftCR Rel-17 38.300 16.5.0 NG\_RAN\_PRN\_enh Late

- Not provided, Can be done as a short post meeting discussion.

- Was first agreed to have a short email discussion (Nokia).

- Chairman intervention due to number of email discussions: Rapporteur is asked to provide the CR to the next meeting instead.

LS in

[R2-2102657](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102657.zip) LS on support of PWS over SNPN (S1-210368; contact: Qualcomm) SA1 LS in Rel-17 NG\_RAN\_PRN\_enh-Core To:SA2, CT1, RAN2, RAN3, SA, CT, RAN Cc:SA3

* Noted

[R2-2102658](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102658.zip) Reply LS on clarification request for eNPN features (S2-2101076; contact: Nokia) SA2 LS in Rel-17 eNPN, NG\_RAN\_PRN\_enh-Core To:RAN2 Cc:RAN3, CT1, SA1

* Noted

LS out

[R2-2103671](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103671.zip) Proposed reply for LS on support of PWS over SNPN (S1-210368/[R2-2102657](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102657.zip)) Nokia, Nokia Shanghai Bell discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2103953](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103953.zip) Discussion on Reply LS on support of PWS over SNPN Qualcomm Incorporated discussion Late

DISCUSSION

- Can we reply that this seesm feasible

- Telecom Italia has concerns on security

- Nokia think we shall reply from RAN2 perspective

- LG also think R2 can do this as this is minimal impact.

* It seems feasible to do this in R17 from R2 persepctive. Very small impact foreseen
* Send reply LS, discuss by email (QC)
* [AT113bis-e][033][eNPN] Reply LS on support of PWS over SNPN (Qualcomm)

Scope: Reply LS on support of PWS over SNPN.

Intended outcome: Approved LS out.

Deadline: Monday April 19.

[R2-2104514](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104514.zip) [Draft] Reply LS on support of PWS over SNPN Qualcomm LS out

* LS is approved in R2-2104640

### 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)

[R2-2104290](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104290.zip) Summary Document for AI 8.16.2 CATT discussion Rel-17 NG\_RAN\_PRN\_enh-Core

DISCUSSION

P5

- Samsung wonder whether the “supported” in “supported group IDs” is significant.

- LG think this word is not significant.

P6

- ZTE think that for initial cell selection there are new aspects to cover in 304.

- Nokia understand that CT1 will specify the selection on NAS level and there is no need to modify As behaviour. QC agrees. MTK Sony LG CATT Ericsson Apple support as well

- ZTE think that we cannot decide this now as suitable cell definition may be impacted.

* Use the term "Credentials Holder (CH)" in future RAN2 discussions for the external entity providing subscription or credential for SNPNs.
* Use the term "Group IDs for Network Selection (GINs)" in future RAN2 discussions for the service provider Group IDs.
* The following assumptions in last meeting are confirmed as agreements,

The new indicator that "access using credentials from a separate entity is supported" is broadcasted in SIB1.

The new indicator that "whether the SNPN allows registration attempts from UEs that are not explicitly configured to select the SNPN" is broadcasted in SIB1.

* GIDs are broadcasted per SNPN in network sharing scenarios.
* RAN2 to revise the previous agreement as following:

In the UE, AS reports broadcast Group IDs per SNPN to NAS.

* To supporting SNPN with subscription or credentials by a separate entity, R2 assumes that there is no impact on cell (re)selection (e.g. no need to change suitable cell criteria).

Chair: Will allocate some CB time to finish proposals, can also discuss additional LS out if needed.

[R2-2102795](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102795.zip) Support SNPN with subscription or credentials by a separate entity OPPO discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2102836](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102836.zip) Support SNPN along with subscription / credentials owned by an entity separate from the SNPN Intel Corporation discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2102914](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102914.zip) Further Consideration on Subscription or Credentials by a Separate Entity CATT discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2102935](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102935.zip) Resolving issues for SNPN with subscription or credentials by a separate entity LG Electronics France discussion NG\_RAN\_PRN\_enh-Core

[R2-2103123](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103123.zip) Support SNPN with subscription or credentials by a separate entity vivo discussion

[R2-2103170](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103170.zip) Accessing to SNPN with credentials owned by a separate entity Huawei, HiSilicon discussion

[R2-2103222](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103222.zip) Access to SNPN with credentials from a different entity Qualcomm Incorporated discussion

[R2-2103268](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103268.zip) Cell (re)selection for Rel-17 NPN enhancements Asia Pacific Telecom co. Ltd, FGI discussion

[R2-2103593](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103593.zip) Discussion on Group IDs from RAN2 perspective Nokia, Nokia Shanghai Bell discussion Rel-17 NG\_RAN\_PRN\_enh

[R2-2103618](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103618.zip) Cell reselection using credentials from a separate entity Sony Europe B.V. discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2103675](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103675.zip) SNPN access using subscription from external Credentials Holder (CH) Ericsson discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2103726](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103726.zip) Left Issues and Analysis on LS from SA2 on Supporting SNPN with Credentials by a Separate Entity CMCC discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2103782](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103782.zip) RAN2 impact to support SNPN with credentials by a separate entity MediaTek Inc. discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2104041](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104041.zip) On Supporting Visited SNPN with Credentials Samsung discussion NG\_RAN\_PRN\_enh-Core

[R2-2104235](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104235.zip) Consideration on the Separate Entity Supporting ZTE Corporation, Sanechips discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2104290](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104290.zip) 8.16.2 eNPN Support SNPN with subscription or credentials by a separate entity CATT discussion Rel-17 NG\_RAN\_PRN\_enh-Core

### 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

[R2-2104492](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104492.zip) Summary for UE onboarding and provisioning for NPN Intel discussion Rel-17 NG\_RAN\_PRN\_enh-Core

DISCUSSION

P1

- Oppo think that group ID shall be broadcast per SNPN.

- ZTE agrees with the first part, and per SNPN, think that for the second part the Group ID value can be different.

- CMCC agree first part is ok. Think the second part should be asked to SA2

- LG think that this is related to the cred by separate entity

- Ericsson are ok with part 1. Huawei as well

P3

- QC think that reselection will not be impacted and this is easily agreed.

- ZTE think that for anycell camp state cell resel may be impacted.

P6

- Oppo think that whether we need AC enahncemet need to be discussed first.

- Nokia think that even if we have UAC impact, there is no need for new cuase value in Msg3

- Huawei support the proposal.

- QC think we might also need an establishment cause but this can be discussed separately

P10

- CATT think we can rephrase to onboarding is not supported for UEs in inactive. Nokia think such statement is too general.

Postpone P5 P8

* UE AS forwards the onboarding indication (and Group IDs if Proposal#1 is agreed) per SNPN to UE NAS for onboarding network selection.
* No UE impact on connected mode mobility for onboarding.
* A new onboarding indication is included in *RRCSetupComplete* message.
* R2 assumes that no enhancement is needed to support onboarding for provisioning the PNI-NPN credentials to UE.
* There is no need to introduce an onboarding request indication in RRC messages for UEs in RRC\_INACTIVE.
* Group IDs per SNPN for onboarding purpose is broadcast in the SIB. FFS whether the Group IDs for onboarding purpose and for credential by separate entity are different.
* R2 assumes that onboarding will not impact cell reselection.

[R2-2102796](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102796.zip) Support UE onboarding and provisioning for NPN OPPO discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2102837](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102837.zip) RAN2 impact on support UE onboarding and provisioning for NPN Intel Corporation discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2102915](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102915.zip) Further Discussion on UE Onboarding and Provisioning for NPN CATT discussion Rel-17

[R2-2102936](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102936.zip) Resolving issues for UE onboarding and provisioning for NPN LG Electronics France discussion NG\_RAN\_PRN\_enh-Core

[R2-2103124](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103124.zip) Support UE onboarding and provisioning for NPN vivo discussion

[R2-2103171](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103171.zip) UE onboarding and remote provisioning for SNPN Huawei, HiSilicon discussion

[R2-2103223](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103223.zip) UE onboarding and provisioning for NPN Qualcomm Incorporated discussion

[R2-2103466](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103466.zip) Consideration of SIB design for UE onboarding and provisioning in eNPN China Telecommunication discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2103594](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103594.zip) Onboarding related considerations Nokia, Nokia Shanghai Bell discussion Rel-17 NG\_RAN\_PRN\_enh

[R2-2103619](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103619.zip) UE on-boarding cell reselection Sony Europe B.V. discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2103676](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103676.zip) UE onboarding Ericsson discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2103690](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103690.zip) Discussion the issues to support UE on-boarding and remote provisioning CMCC discussion Rel-17 NG\_RAN\_PRN\_enh

[R2-2103844](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103844.zip) On the need for additional on-boarding options in eNPN Apple discussion NG\_RAN\_PRN\_enh-Core

[R2-2104043](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104043.zip) On Supporting Onboarding SNPN Samsung discussion NG\_RAN\_PRN\_enh-Core

[R2-2104236](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104236.zip) Consideration on the Onboarding and Provisioning for NPN ZTE Corporation, Sanechips discussion Rel-17 NG\_RAN\_PRN\_enh-Core

### 8.16.4 Other

Including support of IMS voice and emergency services for SNPN (Broadcasting of relevant parameters), however THIS part will not be treated at this meeting, and no input is expected.

## 8.17 NR R17 Other

Time budget: 1 TU

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

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

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

In general incoming LSes may/will be treated.

LS in No Action

[R2-2102611](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102611.zip) Reply LS on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services) (R1-2101976; contact: OPPO) RAN1 LS in Rel-17 5G\_AIS To:SA2, SA4 Cc:RAN2

[R2-2102661](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102661.zip) Reply LS on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services) (S2-2101438; contact: Qualcomm) SA2 LS in Rel-17 5G\_AIS To:SA4 Cc:RAN2, RAN1

[R2-2102673](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102673.zip) Reply LS on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services) (S4-210283; contact: Qualcomm) SA4 LS in Rel-17 FS\_5GXR, FS\_XRTraffic, 5G\_AIS To:SA2, RAN1 Cc:RAN2

Chair: 3 LS above proposed Noted [000]

* [000] 3 LS above are Noted

FRx for higher freq

At RAN91e the following task was agreed: RAN1, RAN2 and RAN4 are asked to provide its analysis or recommendation to RAN#92E (June) on how to introduce the 52.6-71GHz frequency range.

Treat on-line

[R2-2103024](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103024.zip) Discussion on frequency range definition for 52.6 to 71 GHz ZTE Corporation, Sanechips discussion

[R2-2103322](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103322.zip) On frequency range definition for 52.6 – 71 GHz Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ext\_to\_71GHz

[R2-2103828](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103828.zip) Frequency range extension for 52-71 GHz Ericsson discussion Rel-17 NR\_ext\_to\_71GHz

DISCUSSION

- Apple agrees with ZTE. Think R2 can make signaling based on decision from other groups.

- Intel also agrees with ZTE, no showstopper for RAN2, can wait for R4. If we need to, we could use something like FR2.x

- Huawei see value in Ericsson proposal.

- QC agrees it is simpler from R2 to have this FR2 but think R1 R4 opinions are more important.

- TMO US support Ericsson

- ZTE think that the impact to R2 TS cannot be determined now.

* RAN2 can adapt to other groups decision on FRx notation for 52-71 GHz. No critical dependency in RAN2.
* From RAN2 TS point of view the impact will be smaller if it is chosen to re-use FR2 for 52-71 GHz.

Assumption: Chairman to include this in R2 report to RP, can rethink this if we get another LS.

DL 1024 QAM

Open LS on-line. Postpone until FFSes are resolved? Task to produce CRs assigned to LS contact company.

[R2-2102619](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102619.zip) LS on Introduction of DL 1024QAM for NR (R1-2102088; contact: Ericsson) RAN1 LS in Rel-17 NR\_DL1024QAM\_FR1 To:RAN2, RAN4

- Ericsson indicate that there are no FFSes, they were resolved in RAN1 already,.

- Ericsson would prefer to wait for R4 wrt UE capability.

* Noted
* [AT113bis-e][034][1024QAM] (Ericsson)

Scope: Take into account relevant tdocs. Progress RAN2 configuration CR (not UE cap). Can consider whether to send LS.

Intended outcome: Agreed in principle CR. If applicable, approved LS out.

Deadline: Deadline for Comments Mon April 19. Allow for checking until EOM.

[R2-2104530](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104530.zip) Summary of [AT113bis-e][034][1024QAM] Ericsson

* [034] Noted, conclusions taken into account reflected below.

[R2-2103665](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103665.zip) Introduction of DL 1024 QAM for NR Ericsson, Nokia, Nokia Shanghai Bell draftCR Rel-17 38.331 16.4.1 B NR\_DL1024QAM\_FR1

* [034] revised

[R2-2104531](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104531.zip) Introduction of DL 1024 QAM for NR Ericsson, Nokia, Nokia Shanghai Bell draftCR Rel-17 38.331 16.4.1 B NR\_DL1024QAM\_FR1

* [034] Endorsed (final approval at R17 Stage-3 freeze)

[R2-2104532](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104532.zip) Reply LS on Introduction of DL 1024QAM for NR Ericsson LS out Rel-17 NR\_DL1024QAM\_FR1 To:RAN1, RAN4

* [034] LS can be approved, but the reference R2-210xxxx need to be updated to R2-2104532.

R2-2104645 Reply LS on Introduction of DL 1024QAM for NR Ericsson LS out Rel-17 NR\_DL1024QAM\_FR1 To:RAN1, RAN4

* Approved

[R2-2102869](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102869.zip) Introduction of 1024QAM Intel Corporation discussion Rel-17 NR\_DL1024QAM\_FR1

[R2-2104067](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104067.zip) Consideration on the RAN2 impacts of introducing DL 1024QAM for NR ZTE corporation, Sanechips discussion Rel-17 NR\_DL1024QAM\_FR1

* [034] both noted

[R2-2104068](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104068.zip) Introduction of DL 1024QAM for NR FR1 - 38.331 ZTE corporation, Sanechips draftCR Rel-17 38.331 16.4.1 NR\_DL1024QAM\_FR1

[R2-2104069](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104069.zip) Introduction of DL 1024QAM for NR FR1 - 38.306 ZTE corporation, Sanechips draftCR Rel-17 38.306 16.4.0 NR\_DL1024QAM\_FR1

[R2-2103666](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103666.zip) [Draft] Reply LS on Introduction of DL 1024QAM for NR Ericsson LS out Rel-17 NR\_DL1024QAM\_FR1 To:RAN1, RAN4

[R2-2104115](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104115.zip) Support of 1024QAM for NR in TS 38.331 Huawei, HiSilicon CR Rel-17 38.331 16.4.1 2553 - B NR\_DL1024QAM\_FR1

L1L2 Centric Mobility

Treat on-line, determine ways forward offline. Objective to produce a reply (at least partial) by next meeting.

[R2-2102625](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102625.zip) LS on Agreements Pertaining to L1/L2-Centric Inter-Cell Mobility (R1-2102209; contact: Samsung) RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN2 Cc:RAN3, RAN4

* Noted

[R2-2102627](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102627.zip) LS on TCI State Update for L1/L2-Centric Inter-Cell Mobility (R1-2102248; contact: Samsung) RAN1 LS in Rel-16 NR\_feMIMO-Core To:RAN2, RAN3, RAN4 Cc:RAN

* Noted

DISCUSSION

- Samsung think the main difference between companies’ views is whether this is HO-style mobility or not.

- Intel think we can have offline, and not clear whether serving cell change is needed or not. Intel wonder what is R1 assumption on serving cell change. Samsung think serving cell change is not the intention of the eMIMO WI. Think this might need to be clarified.

- vivo agrees serving cell change need to be clear. Think multi-TRP and BFR are additional topics for R2 in this WI. Think we need to consider TU allocation and scope.

- MTK would prefer to not change serving cell.

- Huawei think that we should start with a simple scenario. Think we shold focus on the first 4 questions.

[R2-2103330](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103330.zip) Considerations on L1/L2 centric inter-cell mobility Samsung discussion Rel-17 TEI17

DISCUSSION

- MTK think the observations are reasonable

- Nokia is wondering whether Multi-TRP paradigm is used or not. Nokia wonder if this is mobility or not.

- QC agrees we shall clarify whether this is multi-TRP. Isn’t it easier to configure these as serving cells.

- Huawei think serving non-serving cell shall be preconfigured. Wonder how data transmission can be done on a non-serving cell. Think we can start on Pcell change. Can focus on intra-DU case.

- vivo thikn that indeed this can be preconfigured. Thikn this is for both multi-TRP and mobility cases.

- Ericsson think R1 may not be clear what serving/non-serving cell is from R2 perspective. Would be good to provide definitions to RAN1.

- Intel think it is unclear from WID whether this is multi-TRP or mobility. The WID seesm to address two cases. Think that as long as the UE is in serving cell coverage multi-TRP can be used, but if serving cell coverage is lost, serving cell change is needed.

- Nokia think we need to determine what is feasible.

* Noted

[R2-2102855](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102855.zip) Discussion on L1 L2-Centric Inter-Cell Mobility vivo discussion Rel-17 NR\_feMIMO-Core

[R2-2102870](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102870.zip) Discussion on L1/L2-Centric Inter-Cell Mobility Intel Corporation discussion Rel-17 NR\_feMIMO-Core

[R2-2103079](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103079.zip) Discussion on L1/L2 Mobility Qualcomm Incorporated discussion

[R2-2103260](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103260.zip) RAN2 Impacts of L1L2-Centric Inter-Cell Mobility MediaTek Inc. discussion

[R2-2103639](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103639.zip) Discussion on RAN1 LS for L1/L2-Centric Inter-Cell Mobility Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_feMIMO-Core

[R2-2103823](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103823.zip) On RAN1 LS (R2-21xxxxx) for L1/L2 centric inter-cell mobility Ericsson discussion

[R2-2103866](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103866.zip) L1/L2-centric inter-cell mobility Apple discussion Rel-17 NR\_feMIMO-Core

[R2-2104116](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104116.zip) RAN2 impact of L1/L2 centric mobility and inter-cell multi-TRP Huawei, HiSilicon discussion

[R2-2103341](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103341.zip) DRAFT LS Reply on TCI State Update for L1/L2-Centric Inter-Cell Mobility Samsung LS out Rel-17 TEI17 To:RAN1 Cc:RAN3, RAN4

[R2-2103673](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103673.zip) Draft Reply LS on TCI State Update for L1/L2-Centric Inter-Cell Mobility Nokia, Nokia Shanghai Bell LS out Rel-17 NR\_feMIMO-Core To:RAN1 Cc:RAN3, RAN4, RAN

* [AT113bis-e][035][feMIMO] (Samsung)

Scope: Progress R2 discussion on the relevant questions in the LS (on a high level). Conclude on whether serving cell change is part of this scope or not (if possible). Identify major discussion points for R2. Determine questions that should be asked to R1, if any.

Intended outcome: Report, TBD LS out (questions to R1, no reply)

Deadline: In time for CB Tuesday April 20.

[R2-2104632](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104632.zip) Summary of email discussion [AT113bis-e][035][feMIMO] L1L2 Centric Mobility Samsung

DISCUSSION

P1

- Nokia think the intent is that we indicate something to R1, extra-cell?

- ZTE think indeed the term is strange.

- Chair wonder what is the L1 difference of non-serving cell? SS and ZTE think the only difference is PCI otherwise nothing?

P2

- Chair think it would be good to understand the m-TRP model in order to understand to what extent HO model is needed and how it can work.

- replying to Q from Intel. Samsung think RAN2 can provide understanding for both cases.

- Ericsson think the LS is about two separate questions, mTRP and HO and both are supported from R1 perspective, both Scenario 1` and 2 are applicable and included.

- vivo has similar understanding as Ericsson, need to assume both. Not sure there is enough Tus in R2, can discuss more on common parts between these cases.

- Oppo think mTRP is scenario 1 and HO is scenario 2. Confusion seems to apply for scenario 2. RAN1 hasn’t finished their job so we can focus on Secnario 1 and possibly HO for scenario 2.

- MTK think the scenarios are different and think that in scenario 2 Pcell is changed, can ficus on scenario 1.

- Xiaomi think we should first focus on scenario 1. For Scenario 2 we’d anyway need to send an LS.

- Huawei think the key difference between 1 and 2 is if the serving cell shall be changed. Think we can just agree P2. Also see some commonality between the scenarios.

- Apple think we should cover scenario 1 and 2, not sure what is the new issue of scenario 1.

- QC think the two WI objectives are separate in R1 and this LS is ony about L1 L2 mobility and changing the cell.

- FW also think the amin difference between scenarios is wheher we need to change the Pcell, need to start with Scenario 1 to see impact of L2 procedures for mobility etc.

- LG think it is easy to support mTRP objective but not the mobility objective and think due to TU we should focus on the first.

- Nokia think we can ask R1 about the intentions.

- Samsung think that scenario 1 and 2 are different and 2 brings much more R2 impact, we can focus on scenario 1 now.

P4

- Nokia think the plural of candidate cell(s) should be removed.

- intel wonder whether this proposal is intended to address both HO and mTRP. SS think this is only for mTRP. ZTE think that if this is just for mTRP then this is invisible to the UE. ZTE think this applies to HO

- Chair: it seems this is widely supported but unclear what problem is addressed.

P6

- Huawei wonder how different C-RNTI will work, it may impact ID handling for the RACH procedure.

* The term “non-serving cell(s)” seems to cause confusion, and should be changed (to be consistent with the current RAN2 definitions).
* RAN2 further study the impact on L1/L2 centric mobility for inter-cell multi-TRP-like model and inter-cell HO-like model.
* Chair: while unclear, there seems to be support for: RRC provides the pre-configured configuration of “the candidate cell for L1/L2 centric mobility” (FFS if > 1), and L1/L2 signaling can be used/feasible for the dynamic switching of the pre-configured value.

Chairman: For now, Work on both mTRP and Mobility scenarios.

* Continue by long email discussion, to better understand impact in R2, pave the way for potential high level decisions, and get replies and Q to R1 LS
* [Post113bis-e][061][feMIMO] InterCell mTRP and L1L2 mobility (Samsung)

Scope: Based on R1 LS and discussion at R2 113bis-e, achieve better understanding of impact in R2, pave the way for potential high level decisions, pave the way for decisions needed to reply to R1 LS, identify questions that R2 shold ask R1, if any (can e.g. apply P3 from R2-2104632). Intention to provide a reply to R1 from next meeting.

Intended outcome: Report

Deadline: Long

TX switching Enh – R4

Treat online first.

[R2-2102645](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102645.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 Cc:-

- R4 has agreed many aspects of UE cap. Suggest to discuss this.

- Huawei think R4 has more or less finished.

- Nokia wonder if we can really discuss UE caps unless the signalling has been settled.

- QC also think this R4 LS is too simple and think we need more input.

- Ericsson think we anyway assume to reuse.

- Huawei think that for network configuration we would wait. Think we could start, to arrive at principles for UE cap design. Think that R2 attempts to conclude at this meeting.

- Apple agrees with Nokia.

* Noted
* Topic is Postponed (hope for R1 input at the next meeting)

[R2-2104136](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104136.zip) RAN2 impact to support R17 UL Tx switching enhancement Huawei, HiSilicon, China Telecom, CATT discussion Rel-17 NR\_RF\_FR1\_enh

[R2-2104137](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104137.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

[R2-2104138](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104138.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

* [AT113bis-e][025][NR17] R4 related I (ZTE)

Scope: Treat Handover with PSCell and 35MHz 45MHz Bandwidth R2-2102652, R2-2103032, R2-2103340, R2-2103862, R2-2103863, R2-2104133, R2-2104155, R2-2103033, R2-2103034, R2-2104156, R2-2104249, R2-2104250, R2-2104251

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

Intended outcome: Report and Agreed-in-principle CRs, Approved LS out, if applicable

Deadline: Schedule A

Handover with PSCell – R4

Treat by email

[R2-2102652](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102652.zip) LS on handover with PSCell (R4-2103674; contact: Apple) RAN4 LS in Rel-17 NR\_RRM\_enh2-Core To:RAN2 Cc:-

* [025] Noted

[R2-2103032](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103032.zip) Discussion on handover with PSCell ZTE Corporation, Sanechips discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2103862](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103862.zip) Clarification on handover with PSCell Apple discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2104133](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104133.zip) Discussion on RAN4 LS on handover with PSCell Huawei, HiSilicon discussion Rel-17 NR\_RRM\_enh2

[R2-2104155](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104155.zip) Discussion of LS on Handover with PSCell from RAN4 CATT discussion Rel-17 NR\_RRM\_enh2-Core

* [025] 4 tdocs Noted
* ****[025] Inform RAN4 that RAN2 understands the RRC processing delay (50ms) (defined for inter-RAT handover from NR to E-UTRAN) can be applicable to “NR to EN-DC”, but final decision is up to RAN4.****
* ****[025] Reply to RAN4, the RRC processing delay for “EN-DC to EN-DC” is 20ms.****
* ****[025] Reply to RAN4, the RRC processing delay for “NE-DC to NE-DC” and “NR-DC to NR-DC” is 16ms.****
* ****[025] No need to mention RRC segmentation in the reply LS.****
* ****[025] Reply to RAN4 the answer to Q2 is Option1, and add more details in reply LS to clarify the detailed UE behaviour.****

[R2-2103033](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103033.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2495 - F NR\_newRAT-Core

* [025] revised

[R2-2104581](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104581.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2495 1 F NR\_newRAT-Core

* [025] agreed in principle

[R2-2103034](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103034.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2496 - F NR\_newRAT-Core

* [025] revised

[R2-2104582](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104582.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2496 1 F NR\_newRAT-Core

* [025] agreed in principle

[R2-2104583](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104583.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-15 36.331 15.13.0 4646 - F NR\_newRAT-Core

* [025] agreed in principle

[R2-2104584](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104584.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4647 - A NR\_newRAT-Core

* [025] agreed in principle

[R2-2103863](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103863.zip) Draft LS Reply to RAN4 on handover with PSCell Apple LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4

* [025] revised

[R2-2104580](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104580.zip) LS Reply to RAN4 on handover with PSCell Apple, ZTE LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4

* [025] Approved

[R2-2104156](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104156.zip) Correction on RRC Processing Delay for Handover from NR to E-UTRA CATT draftCR Rel-17 38.331 16.4.1 F NR\_RRM\_enh2-Core

[R2-2103340](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103340.zip) Response LS to RAN4 on HO with PSCell requirements Nokia, Nokia Shanghai Bell LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4

* [025] Both Noted

35MHz 45MHz Bandwidth - R4

Treat by email

Comment: baseline CRs agreed R2 113-e for R15 and R16

[R2-2104249](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104249.zip) Further Clarification on the 35M/45M supporting ZTE Corporation, Sanechips discussion Rel-17 NR\_FR1\_35MHz\_45MHz\_BW-Core

* [025] Noted
* ****[025] Adopt the option 1 (8/11): add clarifications to the current field description of supportedBandwidthDL/UL.****
* ****[025] Ran2 confirm that “based on the current spec, the UE is not allowed to indicate a bandwidth in the supportedBandwidthDL/UL wider than channelBW\_UL/DL”.****

[R2-2104250](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104250.zip) CR on the 35M/45M supporting-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0567 - F NR\_FR1\_35MHz\_45MHz\_BW-Core

* [025] revised

R2-2104548 CR on the 35M/45M supporting-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0567 1 F NR\_FR1\_35MHz\_45MHz\_BW-Core

* [025] Agreed in principle

[R2-2104251](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104251.zip) CR on the 35M/45M supporting-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0568 - A NR\_FR1\_35MHz\_45MHz\_BW-Core

* [025] revised

R2-2104549 CR on the 35M/45M supporting-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0568 1 A NR\_FR1\_35MHz\_45MHz\_BW-Core

* [025] Agreed in principle
* [AT113bis-e][026][NR17] SA related (Huawei)

Scope: Treat False Base Station Detection and Network Sharing Multiple SSB R2-2102669, R2-2103864, R2-2104134, R2-2104135, R2-2102676, R2-2103221, R2-2104161, R2-2104062, R2-2104102.

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

Intended outcome: Report and Agreed-in-principle CRs, Approved LS out, if applicable

Deadline: Schedule A

False Base Station Detection – SA3

Treat by email

[R2-2102669](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102669.zip) Reply LS on False Base Station Detection (S3-210756; contact: Huawei) SA3 LS in Rel-17 FS\_5GFBS To:RAN2 Cc:RAN3

[R2-2103864](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103864.zip) RAN impact on the false based station detection Apple discussion Rel-17 FS\_5GFBS

[R2-2104134](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104134.zip) Discussion on SA3 LS on false base statation detection Huawei, HiSilicon discussion Rel-17 FS\_5GFBS

* [026] 3 tdocs above are Noted

[R2-2104135](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104135.zip) Draft reply LS to SA3 on FBS detection Huawei, HiSilicon LS out Rel-17 FS\_5GFBS To:SA3

[R2-2104626](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104626.zip) Reply LS to SA3 on FBS detection RAN2 LS out Rel-17 FS\_5GFBS To:SA3

* [026] Approved

Network Sharing Multiple SSB – SA5

Treat by email

[R2-2102676](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102676.zip) LS on network sharing with multiple SSBs in a carrier (S5-212403; contact: ZTE) SA5 LS in Rel-17 MANS To:RAN2, RAN3 Cc:-

[R2-2104061](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104061.zip) Consideration on network sharing with multiple SSBs in a carrier ZTE corporation, Sanechips discussion Rel-17 MANS

* [026] 2 tdocs above are Noted

[R2-2104102](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104102.zip) Draft reply LS on network sharing with multiple SSBs in a carrier Huawei, HiSilicon LS out Rel-17 To:SA5 Cc:RAN3

[R2-2104606](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104606.zip) Reply LS on network sharing with multiple SSBs in a carrier RAN2 LS out Rel-17 To:SA5 Cc:RAN3

* [026] Approved

[R2-2103221](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103221.zip) Reply LS on network sharing with multiple SSBs in a carrier Nokia Japan LS out MANS To:SA5 Cc:RAN3

* [026] Noted

[R2-2104062](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104062.zip) Draft reply LS on network sharing with multiple SSBs in a carrier ZTE corporation, Sanechips LS out Rel-17 MANS To:SA5 Cc:RAN3

* [026] Noted

# 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

[R2-2104042](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104042.zip) Work plan of Rel-17 enhancements for NB-IoT and LTE-MTC Ericsson, Huawei Work Plan NB\_IOTenh4\_LTE\_eMTC6-Core

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

Including Summary of AI 9.1.2 (TBD).

[R2-2103014](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103014.zip) Condition for NB-IoT connected mode neighbour cell measurement Qualcomm Incorporated discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103191](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103191.zip) Signalling procedure for connected mode measurements support for reestablishment time reduction Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2103241](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103241.zip) Further discussion on the corresponding measurement before RLF Spreadtrum Communications discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103320](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103320.zip) RAN2 aspects of measurement in connected mode ZTE Corporation, Sanechips discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core R2-2100324

[R2-2103394](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103394.zip) Neighbor cell measurements triggering before RLF Lenovo, Motorola Mobility discussion Rel-17

[R2-2103486](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103486.zip) Neighbour cell measurements in RRC\_CONNECTED Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103925](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103925.zip) Discussion on Fast RLF Recovery procedures in NB-IoT Ericsson discussion

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

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

Including Summary of AI 9.1.3 (TBD).

[R2-2103015](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103015.zip) Determining paging carrier suitability Qualcomm Incorporated discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103176](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103176.zip) Carrier selection enhancement MediaTek Inc. discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103192](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103192.zip) Further analysis on paging carrier selection options Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2103242](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103242.zip) Further discussion on enhanced paging carrier selection and NPRACH carrier selection Spreadtrum Communications discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103321](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103321.zip) Details of CEL-based paging carrier selection ZTE Corporation, Sanechips discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core R2-2100326

[R2-2103487](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103487.zip) Summary of [Post113-e][351][NBIOT R17] Paging carrier selection Huawei report Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103927](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103927.zip) Comparing solution for NB-IoT paging carrier selection Ericsson discussion

### 9.1.4 Other

Includes WI objectives led by other WGs.

Including Summary of AI 9.1.4 (TBD).

[R2-2103364](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103364.zip) Consideration on supporting 14 HARQ for eMTC ZTE Corporation, Sanechips discussion NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103365](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103365.zip) Consideration on supporting 16QAM for NB-IoT ZTE Corporation, Sanechips discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103488](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103488.zip) Discussion on 16-QAM for NB-IoT Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103489](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103489.zip) Support of 14 HARQ Processes in DL, for HD-FDD Cat M1 UEs Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103490](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103490.zip) Support of DL TBS of 1736 bits for HD-FDD Cat. M1 UEs Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2103926](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103926.zip) Support of 16-QAM for unicast in UL and DL in NB-IoT Ericsson discussion

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

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

Time budget: 0.5TU

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

Email max expectation: 2 threads

Note: at RP-91e, the RP chairman captured the following: “Will come back to the NTN IoT scoping discussion at RAN#92e in June 21 and would kindly encourage companies to make a dedicated and honest effort to scope this item so that it fits into the TU budget”.

While RP-210915 didn’t receive official RP endorsement in the end, the RAN2 chairman understands that it indeed contains the agreeable way forward, and RAN2 shall apply this guidence.

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).

Chair Comment after tdoc review: Please note that RAN2 already agreed the following: “From RAN2 point of view, assume that all IoT features up to R16 are supported, and can consider differently case by case when/if problems are found.”. This agreement means e.g. that RAN2 will not spend time to study whether eMTC/NB-IoT Feature X can be supported, unless a specific problem is found that makes the Feature X not work as intended.

### 9.2.1 Organizational scenarios and scope

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

LS in

[R2-2102602](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102602.zip) LS on extraterritorial use of MCC for satellite access (C1-210439; contact: Qualcomm) CT1 LS in Rel-17 5GSAT\_ARCH-CT To:SA1 Cc:SA2, RAN2, SA3

Chair: RAN2 is CCed, No action. Propose Noted [000]

* noted

[R2-2102655](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102655.zip) Reply LS on timer for periodic network selection attempts in satellite access (S1-210357; contact: OPPO) SA1 LS in Rel-17 5GSAT\_ARCH-CT To:CT1 Cc:RAN2, CT6

Chair: RAN2 is CCed, No action. Propose Noted [000]

* noted

[R2-2102656](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102656.zip) Reply LS on extraterritorial use of MCC for satellite access (S1-210358; contact: Qualcomm) SA1 LS in Rel-17 5GSAT\_ARCH-CT To:CT1 Cc:SA2, RAN2, SA3

Chair: RAN2 is CCed, No action. Propose Noted [000]

* noted

[R2-2102663](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102663.zip) Reply LS on IoT-NTN basic architecture (S2-2101663; contact: MediaTek) SA2 LS in Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN To:RAN2, RAN3 Cc:RAN, CT1

Chair: Reply LS, Action to RAN2: Take into account. Propose Noted [000]

* noted

Work plan

[R2-2103800](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103800.zip) FS\_LTE\_NBIOT\_eMTC\_NTN work plan Eutelsat S.A., MediaTek Work Plan Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN Late

Chair: Take into account. Propose Noted without presentation

* Noted

TP/TR

* [Post113bis-e][056][IoT-NTN] Capture agreements (Eutelsat)

Scope: TP for updating the TR with agreements for this meeting. Chair: R2 essential discussion agreements preferably in a separate annex.

Intended outcome: endorsed TP

Deadline: Short

Essential Parts

* [AT113bis-e][027][IoT NTN] Essential Parts (Huawei)

Scope: Take into account the contributions on Essential parts in AI 9.2.1. Collect comments. Identify/confirm enhancements that are considered essential for IoT NTN. Can also collect opinions, on which aspects of those enhancements need further study in the SI. Note it is not expected to achieve full consensus on all points, e.g. for some points it might only be possible to capture observations such as: “there is significant/some/low/no interest to enhance X, to address problem Y”. Exclusion proposals are not the primary focus but can be captured if there is a clear benefit to exclude. Note that this listing is not intended to be an exhaustive scope (the old agreement still generally applies that R2 assumes all functions upto R16 can be supported, unless problems are found).

Intended outcome: Report

Final Deadline for comments: Friday April 16 (so the report can be in time for on-line session Monday). Intermediate deadlines by Rapporteur if needed.

Chair: We will attempt to endorse on-line the offline report conclusions of essential parts and observations (with limited discussion), and determine the way forward towards next meeting.

[R2-2104552](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104552.zip) [Offline-027] IOT NTN essential parts (Huawei) Huawei

P1, 2, 3, 6, 8, 9, 10

- O2: QC think these are ok but wonder what is not essential

- Huawei think that part of O2 can be removed, i.e. remove “is not essential (16/23) but is beneficial (13/23) and”

- Ericsson think P8 the secondary part is not completely clear. Think also fixed cells are important.

- Nokia think P1 last sentence is not ok.

P4, 5, 7, 11

- MTK think P5 and P4 was already agreed

P11

- QC think this cannot be agreed

P4

- Nokia think this may be required as exception reporting requirement may need to be.

- Chair think this requirement was set in order to be met in all deployments and is not really an strictly application derived requirement, given how it was defined in the first place.

Chairman Comment: The below listing is the result of treating the points that had the highest support from the offline discussion, i.e. there may still be some points not in the listing below that should be prioritized based on other criteria, e.g. among the observations in R2-2104552 that were not treated due to lack of time.

Chairman Comment: There was neither attempt to 100% converge on what is essential / non-essential (points below are a bit vanor attempt to define whether “essential” here means “really-essential-cannot-deploy-without” or juat means “companies agrees to great extent that this should and could be supported”

* The following points are endorsed

(24/24) Enhancements to ra-ResponseWindow and mac-ContentionResolutionTimer are essential. R2 assume that design can follow NR NTN agreements as baseline.

(21/21) Enhancements to HARQ-RTT-Timer and UL-HARQ-RTT-Timer are essential. R2 assume that design can follow NR NTN agreements as baseline.

(21/21) Enhancements to sr-ProhibitTimer are essential. R2 assume that design can follow NR NTN agreements as baseline.

(23/23) Enhancements to RLC SN and PDCP SN are not essential.

(24/24) Enhancements to tracking area management are essential.

(24/25) Provisioning of ephemeris is essential. NR NTN agreements can be used as the baseline.

* (22/25) There is significant interest for Power saving in idle mode for NTN IOT devices, e.g. there is significant interest for enhancements to eDRX/PSM (discontinuous coverage) and to relaxed monitoring, SI acquisition and WUS.
* The following points are endorsed

(19/23) Enhancements to UL scheduling for latency reduction are not essential.

Enhancements to PUR are not essential (19/23). Enhancement to pur-ResponseTimer is needed and feasibility of PUR in GEO and LEO scenarios needs to be checked by RAN1.

(18/23) Enhancements to RLC t-Reordering timer are essential. There is no need for further study as design can follow NR NTN agreements.

* Chair: Most companies think Enhancements for power saving in connected mode are not essential for NTN IOT devices.

[R2-2102743](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102743.zip) Discussion on scope of IoT over NTN OPPO discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2102828](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102828.zip) Identifying Essential Topics in IoT-NTN MediaTek Inc. discussion

[R2-2102956](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102956.zip) Determination of essential parts for IoT NTN CATT discussion

[R2-2102961](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102961.zip) Essential adaptations for discontinuous coverage in IoT-NTN Gatehouse Satcom A/S, Sateliot discussion

[R2-2103177](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103177.zip) Essential functionality for IOT NTN Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2103189](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103189.zip) Analysis on essential parts for IoT-NTN functionality for Rel-17 Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2103509](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103509.zip) Discussion on essential functionalities for IOT NTN Huawei, HiSilicon discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2104016](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104016.zip) Discussion on essential functionality in IoT NTN - scenarios and scope Ericsson discussion FS\_LTE\_NBIOT\_eMTC\_NTN

* [027] 8 tdocs Noted

### 9.2.2 User Plane

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

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

[R2-2103843](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103843.zip) On Preamble Ambiguity in Non Terrestrial Networks Apple discussion FS\_LTE\_NBIOT\_eMTC\_NTN

### 9.2.3 Mobility and Tracking Area

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

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

* [AT113bis-e][028][IoT NTN] Mobility and Tracking Area (Mediatek)

Scope: Take into account the contributions in AI 9.2.3. Collect comments. Determine which additional enhancements to be considered for IoT NTN (if any). Note that the RP recommendations to keep scope small and guidance in RP-210915 shall be taken into account when assessing the proposals, i.e. focus on essential enhancements. Non-essential enhancements should be considered only if impact is small.

      Intended outcome: Report

      Final Deadline for comments: Friday April 16 (so the report can be in time for on-line session Monday). Intermediate deadlines by Rapporteur if needed.

[R2-2104551](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104551.zip) [028] Summary for Control Plane Procedures in IoT-NTN MediaTek inc.

DISCUSSION

P1, 2, 3

- Huawei think the last part is not clear. Think we can remove “to be made” use “available” instead.

- Ericsson think P1 P2 P3 is repeating what we had. P1: think cell selection / reselection can be enhanced like this, already agreed. Think the current proposal is for UE power consumption for coverage holes disc coverage. For P2 think there is an agreement for NR-NTN we can reuse, but think the situation is that the issue is the same but solutions may somewhat differ. P3: need rewording, we can wait until additional triggering event has been defined for NR NTN and then decide whether to adopt them or not.

- P3: MTK explaines that new NR NTN new triggers are on top of radio triggers.

- Nokia think we might need to decide if to enhance Connected mode mobility, e.g. CHO is not supported for Cat-M UEs. Huawei think that what is missing is the R4 requirements. Ericsson think from RAN2 point of view that LTE features are applicable also to LTE-M, and think this should be considered supported unless problems are found. For 5GC it is not supported but for EPC it is.

- Xiaomi think that further enhancements for eMTC UEs shold not be precluded.

- P1: ZTE think that other info may be used, e.g. direct info. Think we can use proposals from NR-NTN.

- P1: Oppo think the modified proposal doesn’t exclude anything, think ephemeris is FFS.

- P1: LG think we can clarify further by making the proposl IoT NTN specific. Chair prefers to keep general now due to lack of time

- P2: xiaomi wonder if we sould need to study other options.

* Observation: R2 has (so far) not identified any issue in order to support CHO for Cat-M UEs with EPC.
* (modified P1) For handling of coverage holes or discountinous satellite coverage in a power efficient way R2 assumes that Sattelite assistance information, e.g. ephemeris info, can be used.
* (modified P2) 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)
* (modified P3) For enhancements to CHO, e.g. location and time based triggering events related to CHO in eMTC-based NTN should follow NR-NTN.

DISCUSSION

P4

- MTK indicate that enhancements are quite popular.

- Ericsson think that we could say “Legacy RLF and reestablishment procedures can be used”, can say “minor adaptations, like timers etc can be considered, but not any major enhancements”

- ZTE think that for fast moving cells the connection duration is very short, shorter than connection duration, think in the magnitude of 10s.

- CATT think we don’t need any new RLF triggers, as they will increase the probability of RLF.

- QC agrees that major enhancements should not be considered, but think location/time info can be applied. Major enh to be considered in future release,

- CMCC think RLF will be more frequent and the UE will anyway have the information nto calcaute the coverage of the cell and this info can be used.

- Huawei also think small enhancement can be considered and conditional reestablishment is captured in NR-NTN SI.

- Ericsson do not accept conditional reestablishment.

- Chair observation: There seems to be support to be able to trigger RLF/reest based on prediction (as the UE anyway need such information for paging/TA handing), in particular to reduce outage for e.g. file downloads for NB-IoT.

* For Connected mode, for both NB-IoT and eMTC, Legacy RLF and reestablishment procedures can be used (minor enhancement can be considered).

[R2-2102744](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102744.zip) Discussion on control plane for IoT over NTN OPPO discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2102829](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102829.zip) On Cell-Reselection in NR-NTN MediaTek Inc. discussion R2-2100264

[R2-2102957](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102957.zip) Discussion on the mobility of IoT over NTN CATT discussion

[R2-2103051](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103051.zip) Connected mode and idle mode mobility Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2103136](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103136.zip) Discussion on RRC Idle mobility for IoT NTN Xiaomi discussion

[R2-2103183](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103183.zip) Discussion on connected mode mobility in NB-IoT and eMTC NTN Xiaomi Communications discussion

[R2-2103190](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103190.zip) On the mobility aspects of IoT-NTN Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2103243](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103243.zip) Discussion on the issue of mobility for IoT over NTN Spreadtrum Communications discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2103342](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103342.zip) Control plane aspects of IoT over NTN ZTE Corporation, Sanechips discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2103411](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103411.zip) Potential issues in IoT NTN with discontinuous coverage Lenovo, Motorola Mobility discussion Rel-17

[R2-2103412](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103412.zip) Further considerations on RLF-based mobility for NB-IoT in NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2103510](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103510.zip) Discussion on Mobility for NTN NB-IoT Huawei, HiSilicon discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2103511](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103511.zip) Discussion on discontinuous coverage for NTN NB-IoT Huawei, HiSilicon discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2103727](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103727.zip) RLF-based NB-IoT mobility in NTN CMCC discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2104298](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104298.zip) Discussion on TA Update for IoT-NTN CMCC discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2104017](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104017.zip) Mobility for NB-IoT and LTE-M in NTN Ericsson discussion FS\_LTE\_NBIOT\_eMTC\_NTN

* [028] 16 tdocs Noted

### 9.2.4 Other

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

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

Performance

Treat on-line

[R2-2104033](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104033.zip) Summary of [Post113-e][055][IoT NTN] Performance evaluation Ericsson discussion FS\_LTE\_NBIOT\_eMTC\_NTN Late

- Chair think the ambition level is a bit high, performance evaluation for ITU submission.

- we agreed to look at the paging.

- Chair think we evaluate performance i.e. best effort, mainly just to avoid surprises, there are no clear requirements

- QC wonder what is the usefulness of connection density, think we can just capture what we have for paging. Huawei agrees and think we need link level simulations etc for connection density.

* Invite for input to the TR on paging evalutation for next meeting, use assumptions from this paper when applicable.

[R2-2104020](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104020.zip) Connection density evaluation for IoT NTN devices Ericsson discussion FS\_LTE\_NBIOT\_eMTC\_NTN

* Noted

Features and Enhancements

Way forward to be determined on-line

[R2-2102745](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102745.zip) Discussion on system information enhancement for IoT over NTN OPPO discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2103052](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103052.zip) Enhancement to SIB acquisition Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN R2-2100739

[R2-2103233](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103233.zip) On system information enhancement and IoT features applicability for NTN Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2103357](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103357.zip) SIB and IoT features applicability for IoT over NTN ZTE Corporation, Sanechips discussion FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2102830](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102830.zip) On Providing Ephemeris Information in IoT-NTN MediaTek Inc. discussion

## 9.3 EUTRA R17 Other

Time budget: 0 TU

Tdoc Limitation: X tdocs

Email max expectation: X threads

Including discussion on RAN2 actions for user location tracking attack based on GSMA LS R2-2100003.

No TEI17 documents will be handled in this meeting.

[R2-2102607](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102607.zip) User location identification from Carrier Aggregation secondary cell activation messages (FSAG Doc 88\_009; contact: GSMA) GSMA LS in To:SA3, RAN2

[R2-2102659](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102659.zip) Reply LS on User Plane Integrity Protection for eUTRA connected to EPC (S2-2101306; contact: Qualcomm) SA2 LS in Rel-17 To:SA3, CT1 Cc:RAN2, RAN3, CT4

[R2-2102667](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102667.zip) LS on User Plane Integrity Protection for eUTRA connected to EPC (S3-210563; contact: Vodafone) SA3 LS in To:RAN2, RAN3, CT4, SA2 Cc:CT1

[R2-2102605](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102605.zip) Reply LS on User Plane Integrity Protection for eUTRA connected to EPC (C1-211461; contact: Qualcomm) CT1 LS in Rel-17 UPIP\_SEC To:SA3 Cc:RAN2, RAN3, CT4, SA2

R2-2102703 Introduction of event-based trigger for LTE MDT logging KDDI Corporation draftCR Rel-17 37.320 16.4.0 B TEI17 Late

R2-2102721 Introduction of event-based trigger for LTE MDT logging KDDI Corporation draftCR Rel-17 36.331 16.4.0 B TEI17 Late

[R2-2102819](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102819.zip) UE location attack based on SCell activation Ericsson discussion Rel-17 R2-2100483

[R2-2103016](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103016.zip) User Plane Integrity Protection for eUTRA connected to EPC Qualcomm Incorporated discussion Rel-17 UPIP\_SEC

[R2-2103962](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103962.zip) PDCP for Integrity protection for LTE EPC Intel Corporation discussion Rel-17

[R2-2104039](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104039.zip) Discussion on user location identification from SCell Activation Huawei, HiSilicon discussion Rel-17

[R2-2103928](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103928.zip) Discussion on Capturing PDCP Impacts for User Plane Integrity Protection   Ericsson          discussion       R2-2101477

[R2-2103865](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103865.zip) RAN impact on UP IP for eUTRA connected to EPC          Apple   discussion       Rel-17

[R2-2103295](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103295.zip) User Plane Integrity Protection for LTE   Samsung         discussion       Rel-17

## 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.

# 10Breakout session reports

No documents shall be submitted to this AI or its sub-AIs. It is only for at-meeting-generated contents.

Breakout session reports will be approved by email.

## 10.1 Session on LTE legacy, Mobility, DCCA, Multi-SIM and RAN slicing

[R2-2104301](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104301.zip) Report on LTE legacy, Mobility, DCCA, Multi-SIM and RAN slicing Report Vice Chairman (Nokia)

- [Post113bis-e][000] to be taken into account next meeting: Comments by Leonovo: I think the references to R2-2104254/R2-2104255 (those refer to the corresponding NR CRs) need to be replaced by R2-2104248 and R2-2104253 resp. Furthermore, the LTE CRs address the inter-RAT mobility from E-UTRA. Therefore, “from NR” needs to be replaced by “from E-UTRA”.

- [Post113bis-e][000] to be taken into account next meeting: Leonovo: Wasn’t R2-2103803 further revised and IPA in R2-2104342, So the conclusion to R2-2103803 should to be rephrased similar to R2-2103804.

* [Post113bis-e][000] Approved, with the comments above

## 10.2 Session on R17 NTN and RedCap

[R2-2104302](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104302.zip) Report from Break-out session on R17 NTN and REDCAP Report Vice Chairman (ZTE)

On decisions related to R2-2104370:

- [Post113bis-e][000]: Ericsson would like to object to the following agreement: “The UE reports the UE specific TA pre-compensation during RACH procedure using MAC CE (FFS if thibiss needs to be configured). Actual content is FFS and also depends on further RAN1 input.” The formal reason for the late objection is e-meeting confusion. There has been no particular procedural error. Had there not been confusion, the objection would have been earlier.

- [Post113bis-e][000]: Chairman observation (wo capturing any details): The objecting company can provide a seemingly reasonable technical justifications why it would be good to await RAN1 discussion before deciding when and how the UE shall report such information, and can also explain the nature of the confusion.

- [Post113bis-e][000]: Chairman: As it has been promised that RAN2 shall have more leniency towards revisited decisions for e-meetings (due to higher risk of confusion) and there seems to be some reasonable explanation and justification, the objection is accepted.

- [Post113bis-e][000]: Chairman: As the earlier decision had wide support it is converted into an FFS instead, see below, to make possible to come back without re-discussing everything.

- [Post113bis-e][000]: Chairman comment: Please note that as this FFS has wide support, unless new information becomes available, it will very likely be confirmed later.

* [Post113bis-e][000] The following agreement is disagreed “The UE reports the UE specific TA pre-compensation during RACH procedure using MAC CE (FFS if this needs to be configured). Actual content is FFS and also depends on further RAN1 input.”.
* [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”
* [Post113bis-e][000] Approved, with the comments above

## 10.3 Session on eMTC

[R2-2104303](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104303.zip) Report eMTC breakout session Report Session chair (Ericsson)

* [Post113bis-e][000] Approved,

## 10.4 Session on R17 Small data and URLLC/IIOT

[R2-2104304](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104304.zip) Report for Rel-17 Small data and URLLC/IIoT Report Session chair (InterDigital)

* [Post113bis-e][000] Approved,

## 10.5 Session on positioning and sidelink relay

[R2-2104305](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104305.zip) Report from session on positioning and sidelink relay Report Session chair (MediaTek)

* [Post113bis-e][000] Approved,

## 10.6 Session on SON/MDT

[R2-2104306](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104306.zip) Report from SON/MDT session Report Session chair (CMCC

* [Post113bis-e][000] Approved,

## 10.7 Session on NB-IoT

[R2-2104307](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104307.zip) Report NB-IoT breakout session Report Session chair (Huawei)

* [Post113bis-e][000] Approved,

## 10.8 Session on LTE V2X and NR SL

[R2-2104308](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104308.zip) Report from session on LTE V2X and NR SL Report Session chair (Samsung)

* [Post113bis-e][000] Approved,