3GPP TSG-RAN WG2 NR ASN.1 Ad-Hoc electronic R2-2xxxxxx

Online, April 20-22, 2022

Source: RAN2 Chairman (MediaTek)

Title: Agenda

# 1 Opening of the meeting

**This e-Meeting**

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

- RAN2 NR ASN.1 Ad-hoc electronic can approve and send LS outs, within the scope of the agenda of the ad-hoc.

- Decisions at RAN2 NR ASN.1 Ad-hoc electronic will be ratified at RAN2 118-e (by approval of notes from the Ad-hoc). CRs will not be agreed at this ad-hoc (can be endorsed, or agreed-in-principle), and need to be resubmitted to RAN2 118-e for final agreement.

## 1.1 Call for IPR

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

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

## 1.2 Network usage conditions

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

## 1.3 Other

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

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

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

# 2 Organizational

The intended contents of this subclause is to gather instructions and references to useful information. Can submit procedural / organizational input. RAN2 Handbook: Latest revision in R2-2202103 where the subclause of ASN.1 review has not been updated for Rel-17, and in details is applicable to Rel-16, however procedure wise, ASN.1 review for Rel-17 is similar to Rel-16. Updated information provided also in the email discussion [Post117-e][901][NR17] NR ASN1 review (Ericsson).

[R2-2204300](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204300.zip) Agenda for RAN2 NR ASN.1 Ad-Hoc electronic Chairman agenda

* Endorsed

# 3 NR UE capabilities

The intention is to have possibility to send LS out to ask questions to other WG on UE capabilities or UE features, if needed in order to complete Rel-17 NR UE capabilities. The contents of this Agenda Item depends on and is settled in the email discussion [Post117-e][903][NR17] NR UE capabilties (Intel). No other input is invited.

[R2-2204304](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204304.zip) Release-17 UE capabilities based on R1 and R4 feature lists (TS38.306) Intel Corporation draftCR Rel-17 38.306 17.0.0 NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1, NR\_HST\_FR2, NR\_HST\_FR1\_enh, NR\_BCS4-Core, NR\_FR2\_FWA\_Bn257\_Bn258-Core, NR\_SAR\_PC2\_interB\_SUL\_2BUL, NR\_MG\_enh-Core, NR\_ext\_to\_71GHz-Core, NG\_RAN\_PRN\_enh-Core, NR\_QoE-Core, NR\_ENDC\_SON\_MDT\_enh-Core, NR\_SL\_relay-Core, NR\_SmallData\_INACTIVE, LTE\_NR\_MUSIM-Core, NR\_RF\_FR1\_enh, NR\_UDC-Core, TEI17, LTE\_NR\_DC\_enh2-Core, NR\_slice-Core, NR\_RF\_FR2\_req\_enh2-Core

* noted

[R2-2204305](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204305.zip) Release-17 UE capabilities based on R1 and R4 feature lists (TS38.331) Intel Corporation draftCR Rel-17 38.331 17.0.0 NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1, NR\_HST\_FR2, NR\_HST\_FR1\_enh, NR\_BCS4-Core, NR\_FR2\_FWA\_Bn257\_Bn258-Core, NR\_SAR\_PC2\_interB\_SUL\_2BUL, NR\_MG\_enh-Core, NR\_ext\_to\_71GHz-Core, NG\_RAN\_PRN\_enh-Core, NR\_QoE-Core, NR\_ENDC\_SON\_MDT\_enh-Core, NR\_SL\_relay-Core, NR\_SmallData\_INACTIVE, LTE\_NR\_MUSIM-Core, NR\_RF\_FR1\_enh, NR\_UDC-Core, TEI17, LTE\_NR\_DC\_enh2-Core, NR\_slice-Core, NR\_RF\_FR2\_req\_enh2-Core

* noted

[R2-2204306](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204306.zip) UE capabilities requiring further feedback from RAN1 or RAN4 Intel Corporation discussion Rel-17 NR\_feMIMO, NR\_ext\_to\_71GHz, NR\_IIOT\_URLLC\_enh, NR\_NTN\_solutions, NR\_pos\_enh, NR\_redcap, NR\_UE\_pow\_sav\_enh, NR\_cov\_enh, NR\_IAB\_enh, NR\_SL\_enh, NR\_MBS, NR\_DSS, LTE\_NR\_DC\_enh2, NR\_DL1024QAM\_FR1, NR\_RF\_FR1\_enh, NR\_SmallData\_INACTIVE

DISCUSSION

General

* Apple wonder if we should mention that reply is needed before eo may meeting, for ASN.1 freeze. Chair think that other groups know this.

P1

* HW agrees but think R1 people may not understand the difference between per FS vs per band per BC. Think we can point out that it is in the same place as for earlier release.

P2

* For (a) also y < 4 may be applicable.
* Ericsson think the wording may be simplified but is ok with proposal.
* Huawei think that component 2 and 3 should be optional in RRC. Intel think this e.g. depends on the note, and this can be determined after reply. Ericsson has the same view as Intel. Huawei think that in any case they would be optional and there are cases when they don’t need to be reported.

P3

* CATT think we don’t need to check with R1 as this is for pos in Inactive state which is introduced in Rel-17, so defined from Rel-17. ZTE agrees, the prereq should be the R17 cap. Intel see no harm in asking, as this is not explicit in the feature list. ZTE think we can make assumption and ask R1 to confirm.
* HW think there is a similar issue for FG 27-19. Intel think this can apply also to P3.
* Chair think P3 seems agreeable as it should be easy then for R1 to reply.
* P1, P2, P3, P4 are agreeable

[R2-2204307](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204307.zip) [Draft] Reply LS on updated Rel-17 RAN1 UE features list for NR Intel Corporation LS out Rel-17 NR\_feMIMO, NR\_ext\_to\_71GHz, NR\_IIOT\_URLLC\_enh, NR\_NTN\_solutions, NR\_pos\_enh, NR\_redcap, NR\_UE\_pow\_sav\_enh, NR\_cov\_enh, NR\_IAB\_enh, NR\_SL\_enh, NR\_MBS, NR\_DSS, LTE\_NR\_DC\_enh2, NR\_DL1024QAM\_FR1, NR\_RF\_FR1\_enh, NR\_SmallData\_INACTIVE To:RAN1

* OPPO think that the WID codes need to be checked. Intel indicate that it is the same WIs as in the original LS tp be replied.
* Huawei think offline is needed
* [ASN1AH-e][001] LS out on Rel-17 RAN1 UE features list for NR (Intel)

Intended outcome: agreeable LS out to R1

Deadline: CB Fri April 22

# 4 NR RRC ASN.1 Review

This Agenda Item represents the main contents and focus of this ad-hoc. The scope is: 38.331 and joint 38.331 36.331 issues: Multi-WI issues, general issues, particularly complex issues. The contents of this Agenda Item depends on and is settled in the email discussion [Post117-e][901][NR17] NR ASN1 review (Ericsson). The Rappo

rteur selects which RIL issues to treat (see the Schedule) and tdocs are invited for those issues. NOTE that WI-specific issues shall be submitted directly to R2 118-e.

Procedure

Q&A

* Chair wonder how class0 issues will be handled. Ericsson think this is not clear yet. Nokia thought that class0 should be editorial, and can even be postponed to August. Need to focus on Class 1 2 now. Intel agrees with Nokia. Apple agrees that we should deprioritize class0. QC think that WI rapporteurs should attempt to address class0 issues. Maybe WI rapporteurs can do this without centralized coord. ZTE think maybe we shouldn’t depriortize all, or should we change “important” class0 issues to class 1?
* OPPO think there are lots of issues left to R2 118-e, and there is not much time for the RRC rapporteurs. Can we have a procedure to ensure that this can be done. Huawei agrees.
* Chair think each rapporteur can have an email discussion [pre]. Chair think we can apply the late submission deadline for RRC CRs.
* Ericsson think we cannot use class 1 2 for prioritization. ZTE and QC observe that some class 0 issues > editorial. Ericsson think that if ASN.1 impacting issues among class0 then they should be re-classified.
* Ericsson think we need to have possibility to mark an issue as addressed.
* Lenovo think we need to focus on class 1 and 2. Noone has time to go through the class0 issues.
* Huawei wonder how tdoc limit will apply. Chair clarifies that max 1 tdoc per RIL issue will be allowed – by the company that registered the RIL (and not counted), but hope that companies uses this sensibly. Chair assumes that related RILs shall be addressed in a single tdoc (multi-sourced if multiple companies).
* Intel wonder if the RRC CR rapporteurs will also update the status of RILs when addressing the RIL issues in CRs. Ericsson confirms and we should keep the RRC review file up to date.
* ZTE think we can use excel sheet if we freeze the review file. Ericsson think that the CR rapporteur can use excel files etc but at some point in time we need to merge the status info back into the global review file. ZTE think that search is time consuming.
* LGE think CR rapporteur need to indicate which RIL issue is not addressed by the rapporteur, i.e. which one shall be addressed by company tdocs. LGE think we should not invite for any tdocs at all. CR rapporteur should make a summary document to discuss each issue directly. Nokia agrees with LGE.
* Lenovo think at most TP / draftCRs should be submitted.
* OPPO wonder if all issues will be handled by the CR rapporteur. OPPO think that coversheet should indicate which RILs is address.

For class 0

* + CR Rapporteurs focus on class 1 and 2, but should also implement class 0 corrections (that correct errors). Up to CR rapporteur to what extent to fix (beware that regustered class0 issues may be wrong).
  + Mis-classified class0 issues should be re-classified (Ericsson)

Chair: AP to put this into a full proposal.

38331 ASN1 Review

Rapporteur Input

[R2-2204333](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204333.zip) Rel-17 NR ASN1 Review file Ericsson Limited discussion

[R2-2204334](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204334.zip) Rel-17 NR ASN1 RIL List Ericsson Limited discussion

feMIMO issues / LS out

[R2-2204356](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204356.zip) DRAFT LS on further questions on feMIMO RRC parameters Ericsson, Intel LS out LATE

DISCUSSION

* Ericsson assume that we can have offline.
* Nokia think Q7 is maybe not needed. Has comments on wording as well.
* ZTE think that we should ask most of these questions. For Issue1 maybe should consider to have a common resource pool. Huawei think we should avoid late changes.
* Huawei think we should avoid suggesting changes to RAN1. The issue 2 seems not clear. Nokia agrees, we should tell R1 about R2 interpretations and just ask if they are ok.
* Huawei also think we need a lot of wording changes.

*Chair: we try to avoid suggesting changes (only if needed).*

*Chair: there seems to be support to address the proposed issues, TBD issue6/P7, TBD issue 2*

* [ASN1AH-e][002] feMIMO RRC parameters LS out (Ericsson)

Intended outcome: Agreeable LS out

Deadline: CB Fri April 22

[R2-2204354](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204354.zip) [E010][E016]MIMIO relevant RIL OPPO discussion Rel-17

DISCUSSION

* P1: HW, NOk QC think Alt1 is ok
* Alt1 (in R2-2204354) to be adopted for IE “*mappingPattern-r17*” in ConfiguredGrantConfig and PUSCHConfig

MGenh ToAddModlist structures and identities

[R2-2204302](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204302.zip) [E033][E034] MGenh ToAddModlist structures and identities Ericsson discussion Rel-17 NR\_MG\_enh-Core

[R2-2204314](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204314.zip) [H652][H649][E033][E034] Discussion on MGE ToAddModList structures and identities Huawei, HiSilicon discussion Rel-17 NR\_MG\_enh-Core

[R2-2204329](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204329.zip) [E033][E034][H652] MGenh ToAddModlist structures and identities ZTE Corporation, Sanechips discussion Rel-17 NR\_MG\_enh-Core

DISCUSSION on the 3 tdocs above

* MTK think EP1 EP2 are not needed. Think also that HP1 is not needed, prefer to not change anything (ZTE). Intel agrees. Samsung and CATT and Nokia agrees
* Apple support EP1, think that HP1 is not needed, can have a note.
* QC have some sympathy for Ericsson proposals, think it is similar to what we do for measurements. For measurements we don’t introduce limits in R2 TS, we don’t need even a note. Vivo also support P1 from Ericsson
* LG think that if we don’t go for Ericsson proposal we need to understand how IDs are coordinated across different gap types. MTK think unique ID is assumed and it is clear from the procedure text.
* Ericsson think we will also have ID added for the legacy field. Think if we don’t change we may need more proc text. Think the legacy filed shall not be used in the addmod list.
* Vivo think there will be restrictions from basestation side.
* Huawei think that if we have unique IDs, a single toReleaseList is enough.
* MTK would be ok to attempt single list but think there is not support for this.
* Ericsson think that it is strange to add an ID to legacy field. MTK explains that legacy field is re-used by new functionality. Ericsson wonder if it is really intended that legacy field includes Rel-17 part, ID handling is not aligned with how we usually handle things.
* Apple think that we don’t need to associate the MO and the new ID for legacy gap.

*Chair: Nothing agreeable for the moment, not even clear what are the main troubling issues to resolve. Can consider further for R2 118-e.*

Merged handling of Meas Gaps and Pos gaps

[R2-2204347](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204347.zip) discussion on merged handling of Meas Gaps and Pos gaps vivo discussion Rel-17 NR\_MG\_enh-Core

*Proposal 1: The pre-MG for PosEnh can be moved into MeasGapConfig and shall use a separate gapToAddModList from that for MGenh.*

*Proposal 2: Clarify that the pre-condition to request for per-MG of PosEnh is that the measurement gaps are either not configured or the activated measurement gaps are not sufficient.*

DISCUSSION

P1

* ZTE doesn’t support separate lists, can use a single list and have a separate restrictions. Think that pos can use also legacy gap. Think R4 need to clarify whether R17 pos gaps can be used for other purpose. HW think pos gaps max number appleis only for Pos (dec by R1).
* Intel think that whether we have separate or common list only related to the max number of gaps, but this shall be decided by R4. Think that if max related all gaps, then can use single list.
* MTK think the easiest solution is to just have a single list, easier to extend if we shall extend to e.g. have priority also for Pos gaps.
* Vivo point out that Pos gaps have different behaviour, e.g. activated by MAC CE, so they need to be discriminated. Huawei agrees.
* Ericsson think we should leverage on Gap Coord work. Maybe we need to send LS to R4. Maybe an Email disc to R2 118-e.
* QC think MAC CE need to indicate ID referring to RRC configuration.

P2

* Vivo think this can be resolved as Pos WI specific items. MTK think it is somewhat wider.

*Chair: treat this is a WI specific Pos Issue*

* The pre-MG for PosEnh can be moved into MeasGapConfig and use a separate gapToAddModList from that for MGenh.

[R2-2204312](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204312.zip) [M607][Z141][H566][H567] Clarification on preconfigured positioning gap MediaTek Inc., ZTE Corporation draftCR Rel-17 38.331 17.0.0 F NR\_MG\_enh-Core, NR\_pos\_enh-Core

* Noted, main point above

[R2-2204318](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204318.zip) [H581][Z141][M607] Correction for pre-configured MG for POS Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_pos\_enh-Core, NR\_MG\_enh-Core

Revised

[R2-2204355](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204355.zip) [H581][Z141][M607] Correction for pre-configured MG for POS Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_pos\_enh-Core, NR\_MG\_enh-Core

* Noted partially, a main point above

[R2-2204316](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204316.zip) [H566][H567] Correction for Location Measurement Indication Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_pos\_enh-Core, NR\_MG\_enh-Core

* Nokia: ok with the CR, but wonder whether “all MG” could be “all activated MG”
* MTK ok with the intention of the CR, but tink the last change changes the intention of the CR.

*Chair: there is some support, but the details may need to be further discussed. Treat as a Pos WI specific issue at R2 118-e.*

PUSCH-TimeDomainResourceAllocationList merging issue

[R2-2204346](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204346.zip) [E057] Coverage enhancement TDRA table Ericsson discussion NR\_cov\_enh

DISCUSSION

* MTK are ok with proposal but would like to avoid reuse of IE with same ranges, i.e. can have CE field but should not duplicate the sub-fields, can refer to IE’s instead.

[R2-2204341](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204341.zip) PDSCH-TimeDomainResourceAllocationList and PUSCH-TimeDomainResourceAllocationList merging issue (RIL: Q300, E057) Huawei, HiSilicon discussion Rel-17 NR\_ext\_to\_71GHz-Core, NR\_cov\_enh-Core

DISCUSSION

* Ericsson think that k2-r17 is not only for multiPUSCH.
* Intel think that k2 is anyway different, should add a qualifier somehow,
* Nokia would like to think a bit more
* QC agrees with the proposal to add Multi- to the lists.
* Rename k2-r17 to something else to differentiate it from k2-r16.

*Chair: There is clear interest for further clarifications on TDRA IEs and structure, but companies seems not ready for agreement. Consider for R2 118-e*

PDSCH-TimeDomainResourceAllocationList merging issue

[R2-2204301](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204301.zip) PDSCH-TimeDomainResourceAllocationList merging issue [Q300] [Q301] [Q302] Qualcomm Incorporated discussion Rel-17 NR\_ext\_to\_71GHz-Core, NR\_MBS-Core

P1

* Ericsson prefer to keep the current design.
* Huawei think we attempt to do non-critical extension. Nokia agrees. Intel MTK agrees.
* [Q300] Extend k0-r16 instead of introducing PDSCH-TimeDomainResourceAllocation-r17 Adopt changes shown in section 3.2.
* [Q302] Remove last sentence in *repetitionNumber* field description and update the conditional presence table, as shown in section 3.1.
* P2 no change needed (r16 version intended).

Extension of FeatureCombination in RICS

[R2-2204338](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204338.zip) [E126] Future extension of FeatureCombination Ericsson discussion Rel-17 NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1, NR\_SL\_relay-Core

[R2-2204340](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204340.zip) Extension of FeatureCombination IE (RIL: E126) Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh-Core, NR\_redcap-Core, NR\_slice-Core

DISCUSSION on the two docs above

* QC think we need to assign meaning to the spare values to make it work otherwise spare is associated with general RRC error handling.
* LGE think introduction of spare values was discarded and has some drawbacks. Doesn’t support to rediscuss this.
* Xiaomi agrees there is no need for extension marker, don’t support spares in SIB1, can extend critically if needed.
* Vivo agrees with LGE, but are ok with HW proposal.
* Nokia also favouring HW proposal, support better slice group encoding.
* CATT wonder if the new feature can be covered by simple indications.
* ZTE think that spare values in the SIB is not so useful.
* Intel are ok with current, have slight preference for HW rather than Ericssion.
* Chair: there is significant support to not use the extension marker.
* Agree to not use the “…”-extension marker for featureCombination IE, TBD how.

Extension of SIBs

I013: SIB1: featurePriorities - remove extension marker

I014: SIB1: SDTConfigCommonSIB – remove extension marker, new field for extension instead.

B002: SIB17: Remove extension marker from IE TRS-ResourceSet-r17

[R2-2204349](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204349.zip) [N011][N016] SIB extensions Nokia, Nokia Shanghai Bell discussion Rel-17 TEI17

General use of extension marker

[R2-2204336](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204336.zip) [E108] General use of extension markers in RRC Ericsson discussion Rel-17 NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1

[R2-2204342](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204342.zip) [E108] Usage of extension markers Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core, LTE\_NR\_DC\_enh2-Core, LTE\_NR\_MUSIM-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_SmallData\_INACTIVE-Core, NR\_SL\_relay-Core, NR\_slice-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_ENDC\_SON\_MDT\_enh-Core, NR\_QoE-Core, NR\_SL\_enh-Core, NG\_RAN\_PRN\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_ext\_to\_71GHz-Core, NR\_MG\_enh-Core

Setup Release

[R2-2204335](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204335.zip) RIL E007, Set Modify Release structure Ericsson Limited discussion

[R2-2204343](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204343.zip) [E007] Usage of SetupRelease Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core, LTE\_NR\_DC\_enh2-Core, LTE\_NR\_MUSIM-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_SmallData\_INACTIVE-Core, NR\_SL\_relay-Core, NR\_slice-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_ENDC\_SON\_MDT\_enh-Core, NR\_QoE-Core, NR\_SL\_enh-Core, NG\_RAN\_PRN\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_ext\_to\_71GHz-Core, NR\_MG\_enh-Core

I043: ServingCellConfig: additionalPCIList-r17, big field: use setuprelease with need code M to allow delta config.

Delta signalling other

[R2-2204303](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204303.zip) [RIL I005] Need code for IIOT time reference information in DL Information transfer Intel Corporation discussion Rel-17 38.331 NR\_IIOT\_URLLC\_enh-Core

X605, I041 Delta sign

[R2-2204339](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204339.zip) Delta signalling issues (RIL: I005, E007, X605, I041, I043) Huawei, HiSilicon discussion Rel-17 NR\_feMIMO-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_NTN\_enh-Core

IMPORTS to RRC module

[R2-2204322](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204322.zip) [E124][E125] Discussion on the IMPORT into NR RRC module Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_SL\_relay-Core

[R2-2204337](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204337.zip) [E124][E125] Imports of PC5 info into the RRC module Ericsson discussion Rel-17 NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1

Need Codes and optional fields for PC5

[R2-2204321](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204321.zip) [H634] Correction for the need code and conditions for optional fields in PC5 RRC message Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_SL\_relay-Core, NR\_SL\_enh-Core

Introduction of new IE sections

I016: pci-arfcn-r17 is used in mutiple places, Proposal to define an IE.

[R2-2204352](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204352.zip) [N108] Shotgun coding in L1 parameters Nokia, Nokia Shanghai Bell discussion Rel-17 TEI17

[R2-2204319](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204319.zip) [H585] Correction for new IE for TimeAlignmentTimer Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_SmallData\_INACTIVE-Core, NR\_pos\_enh-Core

H008 General on Need codes

[R2-2204344](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204344.zip) [H008][E010] Various questions about fields in extension addition groups Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core, LTE\_NR\_DC\_enh2-Core, LTE\_NR\_MUSIM-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_SmallData\_INACTIVE-Core, NR\_SL\_relay-Core, NR\_slice-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_ENDC\_SON\_MDT\_enh-Core, NR\_QoE-Core, NR\_SL\_enh-Core, NG\_RAN\_PRN\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_ext\_to\_71GHz-Core, NR\_MG\_enh-Core

N104 General on Need codes

[R2-2204350](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204350.zip) [N104] Using Need S and Need R Nokia, Nokia Shanghai Bell discussion Rel-17 TEI17

[R2-2204345](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204345.zip) [N104] Need R vs. Need S Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core, LTE\_NR\_DC\_enh2-Core, LTE\_NR\_MUSIM-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_SmallData\_INACTIVE-Core, NR\_SL\_relay-Core, NR\_slice-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_ENDC\_SON\_MDT\_enh-Core, NR\_QoE-Core, NR\_SL\_enh-Core, NG\_RAN\_PRN\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_ext\_to\_71GHz-Core, NR\_MG\_enh-Core

V160 6.5 Existing SI modification indication, Proposed to clarify that this is not for eDRX

F002 feMIMO/DCenh complex issue

*ServingCellConfig: tciInfo*

*[Description]: in DC enhancement, RAN2 agreed to perform BFD on the PSCell after SCG is deactivation if the network configures it. In addition, as shown in the field description, the UE shall use the previously activated TCI states for PDCCH as RS for BFD, if no RS if configured. However, in feMIMO, TRP of non-serving cell can be used. This means that the previously activated TCI states for PDCCH can come from non-PSCell. In this case, we think that the UE will not perform BFD .*

*[Proposed Change]: if bfd-and-RLM is configured and no RS is configured in RadioLinkMonitoringConfig for BFD, the UE shall use the previously activated TCI states for PDCCH on the PSCell as RS for BFD. For example:*

*tci-Info*

*…*

*If configured for the PSCell when the SCG is indicated as deactivated in the containing message:  
…  
- if bfd-and-RLM is configured and no RS is configured in RadioLinkMonitoringConfig for RLM, respectively for BFD, the UE shall use the indicated TCI states for PDCCH on the PSCell as RS for RLM, respectively for BFD.*

*When this field is absent for the PSCell and the SCG is being deactivated:  
…..  
- if bfd-and-RLM is configured and no RS is configured in RadioLinkMonitoringConfig for RLM, respectively for BFD, the UE shall use the previously activated TCI states for PDCCH on the PSCell as RS for RLM, respectively for BFD.*

I034 New version of field vs NCE of existing field

*PDCCH-Config: monitoringCapabilityConfig-r17*

*[Description]: This is done as a critical extension. An NCE with just r17monitoringcapability would have been sufficient as the original field is also optional*

*[Proposed Change]: Define as an NCE with just r17monitoringcapability*

V167 Use of spare bit

*[Description]: Spare bit in RRCSetupRequest*

*[Proposed Change]: The spare bit in RRCSetupRequest was reserved for future use. The current specification doesn’t specify the value for this spare bit, i.e. UE could set either 0 or 1 for this bit. In case we want to use this spare bit in future, but the gNB cannot be aware the Release of the UE during RRC set up. So the gNB has no idea whether needs to decode this bit.*

*While in Rel-17 RedCap, this spare bit is also reserved, but there is still no default value definition for this bit. Considering there is early identification in RedCap, i.e. NW could identify the UE type during RRC setup, which is mandatory for RedCap UEs, in this case, a default value (e.g. value 0) for this spare bit could be set for RedCap UEs, while the other value (e.g. value 1) could be used in future for other UEs.*

*Thus, the proposed change is to set a default value for RedCap UEs. Details could be found in the contribution R2-22xxxx.*

*[Comments]: Rapp: From 38331 8.4: “A transmitter compliant with this version of the specification shall set spare bits to zero.“. Rapporteur understands there is nothing needed in Rel-17*

B102 OPTIONAL vs Mandatory

*[Description]: If ReconfigurationWithSync including sl-PathSwitchConfig is configured to a remote UE, UE will perform path switching to a relay UE and start Txxx rather than T304. Therefore, in this case, T304 is not needed. Thus, T304 should be changed from ‘mandatory’ to ‘optional’*

*[Proposed Change]: OPTIONAL should be added for t304*

B100 Usage of SIB1 vs other SIB

[R2-2204328](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204328.zip) [B100] Usage of SIB1 or other SIB12 ZTE, Sanechips discussion Rel-17

H020 Suffix v1700 or r17

*ConfiguredGrantConfig: noOfHARQ-ProcessesExt-r17*

*[Description]: This extends an existing field, so the suffix should be v1700*

*[Proposed Change]: Change the suffix to v1700.*

NTN

[R2-2204313](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204313.zip) [RIL C214]Discussion and TP on the configuration of ntn-Config CATT discussion Rel-17 38.331 NR\_NTN\_solutions-Core

SL relay – SIB request

[R2-2204320](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204320.zip) [H629] Correction for SI request for posSIB for SL remote UE Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_pos\_enh-Core, NR\_SL\_relay-Core Revised

[R2-2204348](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204348.zip) [H629] Correction for SI request for posSIB for SL remote UE Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_pos\_enh-Core, NR\_SL\_relay-Core [R2-2204320](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204320.zip)

[R2-2204327](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204327.zip) [Z670] Correction on remote UE SIB request ZTE, Sanechips discussion Rel-17

SL relay – SL DRX etc

[R2-2204308](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204308.zip) [H675] Correction on relay link DRX configuration Huawei, HiSilicon CR Rel-17 38.331 17.0.0 2971 - F NR\_SL\_enh-Core, NR\_SL\_relay-Core

[R2-2204331](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204331.zip) [H675,Z676]CR on sidelink UE information for eSL and SL relay ZTE Corporation, Sanechips draftCR Rel-17 38.331 17.0.0 NR\_SL\_enh-Core

SL relay – SL Discovery resource

[R2-2204323](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204323.zip) [V380] On the applicability of power-saving resource allocation to NR SL discovery vivo discussion NR\_SL\_enh-Core, NR\_SL\_relay-Core

[R2-2204309](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204309.zip) [V380] Correction on SL discovery transmission resource pool configuration Huawei, HiSilicon CR Rel-17 38.331 17.0.0 2972 - F NR\_SL\_enh-Core, NR\_SL\_relay-Core

Pos and SDT

[R2-2204317](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204317.zip) [H572] Correction for beam consolidation for TA validation in INACTIVE Huawei, HiSilicon draftCR Rel-17 38.331 17.0.0 F NR\_SmallData\_INACTIVE-Core, NR\_pos\_enh-Core

SL relay – others

[R2-2204326](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204326.zip) [Z657] [Z658] [Z659] Correction on the Sidelink discovery transmission ZTE, Sanechips draftCR Rel-17 38.331 17.0.0 NR\_SL\_relay-Core

[R2-2204315](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204315.zip) [RIL C122]Conditions of RemoteUEInformationSidelink Transmission CATT discussion Rel-17 38.331 NR\_SL\_relay-Core

[R2-2204332](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204332.zip) [Z684]Correction on Destination ID list ZTE Corporation, Sanechips draftCR Rel-17 38.331 17.0.0 NR\_SL\_relay-Core

IAB

[R2-2204324](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204324.zip) [Z630]Correction on configuration of availability indication per RB set group in 38.331 ZTE, Sanechips draftCR Rel-17 38.331 17.0.0 NR\_IAB\_enh-Core

[R2-2204325](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204325.zip) [Z629][Z631][Z632]Correction on F1-C transfer in IAB CP-UP separation in 38.331 ZTE, Sanechips draftCR Rel-17 38.331 17.0.0 NR\_IAB\_enh-Core

Redcap

[R2-2204353](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204353.zip) [FW001] RRC correction for RedCap Futurewei Technologies discussion Rel-17 NR\_redcap-Core

36331 ASN1 review

Rapporteur Input

[R2-2204310](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204310.zip) ASN.1 Review File (LTE) Samsung Electronics draftCR Rel-17 36.331 17.0.0 F TEI17 Late

Revised

R2-2204357 ASN.1 Review File (LTE) Samsung Electronics draftCR  Rel-17     36.331     17.0.0      F       TEI17       Late

[R2-2204311](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204311.zip) LTE Rel-17 ASN.1 Review, Class 0 issues Samsung Electronics report Rel-17 Late

H201 Extension LoggedEventTriggerConfig-r17:

*whether to add the extension marker for future extension. Plus, it seems no need to define EventType-r17 i.e. CHOICE structure of EventType-r17 can be directly implemented in LoggedEventTriggerConfig-r17.*

B001 Extension SIB32: SatelliteInfo-r17:

*Extension marker should not be used in list elements if they are broadcast in SIB since it costs approx. 3 bytes overhead per list element. Further extensions should be introduced using parallel lists.*

H008, H009, Global IEs:

*Proposal to Define the global IE for offsetThresholdTA-r17 and sr-ProhibitTimerExt-r17: they have the same value range in eMTC and NB-IoT.*

H110 Group IE

*Define measParameters-v1700 in UE-Capability-NB-v1700-IEs, and move the fields connModeMeasIntraFreq-r17 and connModeMeasInterFreq-r17 to measParameters-r17. [Comments] [Lenovo] Agree but suffix of measParameters-r17 / MeasParameters-NB-r17 should be “-v1700”. Huawei-v19: Disagree with Leneovo. There is no previous version of measParameters. [Lenovo-v20] There is a previous version meas-Parameters-r16 / Meas-Parameters-NB-r16.*

B002 Need Code ConnMeasConfig-NB-r17: s-MeasureInter-r17

*[Description]: Need code s-MeasureInter-r17 is set to Need OP but in the description the UE behaviour when the field is absent is missing.*

*[Proposed Change]: Replace “Need OP” with “Need OR”.*

*[Comments]: Huawei0v19: Disagree. Should be OP and behaviour in absence (use value of s-MeasureIntra) specified in filed decsription*

H010 Need Code

*[Description]: sr-ProhibitTimerExt-r17 is defined as OPTIONAL Need OP. It should be Need OR to allow deconfiguration*

*[Proposed Change]: Change need OP to Need OR*

H011 Need Code PhysicalConfigDedicated: pusch-ConfigDedicated-v1700 and pucch-ConfigDedicated-v1700

*[Description]: the two parameters should be NEED ON*

*[Proposed Change]: Change to NEED ON*

H018 Need Code sr-ProhibitTimerExt-r17

*[Description]: Should be Need OR to allow deconfiguration*

*[Proposed Change]: Change to Need OR*

H105 Need code nrs-PowerRatio-r17

*[Description]: Need code is missing*

*[Proposed Change]: Add Need OR – see H106*

Late: E806 SIB Scheduling

*[Description]: To address the "SIB24" issue RAN2 added two new scheduling lists, one that can schedule SIBs in the SI-messages scheduled by the legacy list, and one that can schedule SIBs in new SI messages. Currently the newly added SIBs (from TEI[MINT] and IoT NTN) can be scheduled in both the legacy and the new lists, but that may cause issues. It is better to restrict the ASN.1 so that the newly added SIBs in Rel-17 are only scheduled using the new lists.  
This topic was discussed at RAN2#112-e based on the paper R2-2009950, but no conclusion was reached then. We will provide a Tdoc to discuss this topic and propose the following change and propose to continue adding new SIBs only in the new lists as a general approach.*

*[Proposed Change]: Remove "sibType30-v1700, sibType31-v1700, sibType32-v1700" from SIB-Type (without suffix).*

Withdrawn

R2-2204330 [Z606] Discussion on SDAP for NR MBS ZTE, Sanechips discussion Rel-17 Withdrawn

[R2-2204351](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_118\Docs\R2-2204351.zip) [N108] Shotgun coding in L1 parameters Nokia, Nokia Shanghai Bell discussion Rel-17 TEI17 Withdrawn

# 5 Other

Any other business, if needed, restricted to finalization of Rel-17 of RAN2 CP protocols.