3GPP TSG-RAN WG2 Meeting #115 electronic R2-2xxxxxx

Online, 16-27 August 2021

Source: Session Chair (MediaTek)

Title: Report from session on sidelink relay and positioning

# Status of At-Meeting Email Discussions

This subclause is not an Agenda Item. It contains a running summary of the email discussions assigned to take place during the meeting weeks. This section will be moved to an appendix in the final version of the report.

* [AT115-e][600][POS][Relay] Organisational Nathan – Positioning/Relay (MediaTek)

Scope: Organisational discussions and announcements, as needed throughout the meeting weeks

Intended outcome: Well-informed participants

Deadline: Friday 2021-08-27 1000 UTC

* [AT115-e][601][POS] AI 4.4 Positioning corrections Rel-15 and earlier (Lenovo)

Scope: Handle the CRs in the following tdocs and determine conclusions:

* R2-2107261/R2-2107262
* R2-2107784
* R2-2107785/R2-2107786
  + Note: R2-2107785 and R2-2107786 were submitted under AI 5.5 and relate to TS 37.355, but are functionally shadows of R2-2107784

Intended outcome: Agreed CRs (without comeback), report in R2-2108931

Deadline: Tuesday 2021-08-24 0800 UTC

* [AT115-e][602][POS] AI 5.5 Positioning corrections (Huawei)

Scope: Handle the CRs in the following tdocs and determine conclusions:

* R2-2107329/R2-2107330
* R2-2108407

Intended outcome: Agreed CRs (without comeback), report in R2-2108932

Deadline: Tuesday 2021-08-24 0800 UTC

* [AT115-e][603][POS] AI 7.5 LTE Positioning and Rel-16 stage 2 CRs (Qualcomm)

Scope:

* Handle the CR in R2-2107959 and determine conclusion.
* Handle the CR in R2-2107333 and determine conclusion
* Handle the CR in R2-2107958 and determine conclusion

Intended outcome: Agreed CRs (without comebacks), report in R2-2108933

Deadline: Tuesday 2021-08-24 0800 UTC

* [AT115-e][604][Relay] PC5 and SRB0 adaptation layer (OPPO)

Scope:

* Discuss the proposals for a relaying adaptation layer on PC5 interface, and conclude on whether the adaptation layer should be supported in Rel-17.
  + Taking into account the potential for distinguishing between relayed and non-relayed traffic on PC5 hop
* Discuss the need for the adaptation layer on SRB0, and conclude on whether the adaptation layer should be used on SRB0.
  + Taking into account the potential for distinguishing between relayed and non-relayed traffic on Uu hop
* Discuss the assignment of the local remote UE ID (by the relay UE or the gNB)

Intended outcome: Report in R2-2108934

Deadline:

* Phase 1 (gauge initial support for the proposals, and see if downselection of options is possible): Wednesday 2021-08-18 2000 UTC
* Phase 2 (final conclusions): Tuesday 2021-08-24 2000 UTC
* [AT115-e][605][POS] LS to RAN3 on SRS-PosResource configuration (Samsung)

Scope: Draft an LS to RAN3 on the configuration issue from R2-2107960.

Intended outcome: Approved LS in R2-2108935

Deadline: Tuesday 2021-08-24 0600 UTC

* [AT115-e][606][POS] LPP need code guidelines for uplink (CATT)

Scope: Update the guidelines for need codes in 37.355 in accordance with the principle that need codes are sometimes used in the uplink, but in this case the requirements are not applicable (i.e. we do not specify the network behaviour).

Intended outcome: Agreed CR in R2-2108936

Deadline: Tuesday 2021-08-24 0600 UTC

* [AT115-e][607][POS] PRS-only TP flag and other identifiers (Huawei)

Scope: Discuss the possibility of signalling cell identifiers for the PRS-only TP, and the proposal for including a TP-ID, and draft an agreeable CR.

Intended outcome: Agreeable CR in R2-2108937

Deadline: Tuesday 2021-08-24 0600 UTC

# 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

## 4.4 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.

[R2-2107260](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107260_PosSI_scheduling_for_eMTC.doc) Further discussion on Positioning SI message scheduling for eMTC Lenovo, Motorola Mobility discussion Rel-15 LCS\_LTE\_acc\_enh-Core

[R2-2107261](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\36331_CR4691_(Rel-15)_R2-2107261_Corrections_PosSI_scheduling_eMTC.docx) Addition of scheduling restrictions of positioning SI messages for eMTC Lenovo, Motorola Mobility CR Rel-15 36.331 15.14.0 4691 - F LCS\_LTE\_acc\_enh-Core

[R2-2107262](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\36331_CR4692_(Rel-16)_R2-2107262_Corrections_PosSI_scheduling_eMTC.docx) Addition of scheduling restrictions of positioning SI messages for eMTC Lenovo, Motorola Mobility CR Rel-16 36.331 16.5.0 4692 - A LCS\_LTE\_acc\_enh-Core

[R2-2107784](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107784.docx) Correction on ProvideCapabilities and ProvideLocationInformation Samsung CR Rel-14 36.355 14.7.0 0258 - F TEI14

# 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.

## 5.5 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.

[R2-2106928](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106928_R3-212802.docx) Reply LS on E-CID LTE measurement in Rel-15 measurements (R3-212802; contact: Huawei) RAN3 LS in Rel-15 NR\_pos-Core To:RAN2

[R2-2107329](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107329%20Correction%20to%20E-CID-R15.doc) Correction to E-CID-R15 Huawei, HiSilicon CR Rel-15 38.305 15.8.0 0063 2 F NR\_newRAT-Core R2-2105052

[R2-2107330](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107330%20Correction%20to%20E-CID-R16.doc) Correction to E-CID-R16 Huawei, HiSilicon CR Rel-16 38.305 16.5.0 0064 2 F NR\_newRAT-Core R2-2105053

[R2-2107785](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107785.docx) Correction on ProvideCapabilities and ProvideLocationInformation Samsung CR Rel-15 37.355 15.2.0 0316 - A TEI14

[R2-2107786](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107786.docx) Correction on ProvideCapabilities and ProvideLocationInformation Samsung CR Rel-16 37.355 16.5.0 0317 - A TEI14

[R2-2108407](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108407%20release-15.docx) Correction for Roles of gNB and ng-eNB for positioning in release-15 Ericsson CR Rel-15 38.305 15.8.0 0079 - F NR\_newRAT-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: 25 tdocs in total for all sub agenda items, or the restriction for each sub-AI, whichever is more restrictive.

## 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: 6 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).

[R2-2107331](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107331%20Correction%20to%20NRPPa%20PDU%20transfer%20for%20uplink%20positioning.doc) Correction to NRPPa PDU transfer for uplink positioning Huawei, HiSilicon CR Rel-16 38.305 16.5.0 0073 1 F NR\_pos-Core R2-2105055

Discussion:

Nokia think it is more of a RAN3 issue, and the procedure currently states it is for gathering data from the gNB, so we may not need to show the details within the gNB. They think it could be discussed in RAN3.

CATT understand the intention but have some detailed comments.

Apple agree with Nokia that it is a RAN3 issue. Ericsson also agree.

* Not agreed

[R2-2107333](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107333%20Correciton%20to%20NB-IoT%20positioning.doc) Correciton to NB-IoT positioning Huawei, HiSilicon CR Rel-16 38.305 16.5.0 0076 - F NR\_pos-Core

Discussion:

CATT wonder about the relationship between step 8 in the original procedure and the new section; they see that both of them mention the CP CIoT optimisation and are not sure if the split is needed. Huawei understand that the original section is specific to sending the measurement report in RRC\_CONNECTED and we need to cover the case of sending the report in RRC\_IDLE.

Qualcomm wonder why this is for NB-IoT only and not also eMTC. They agree with the intention of the CR but think it should be a separate section, not under NB-IoT.

* Email (merge into discussion [603])

[R2-2107334](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107334%20Correction%20to%2038.305%20on%20NG-RAN%20positioning%20operations.doc) Correction to 38.305 on NG-RAN positioning operations Huawei, HiSilicon CR Rel-16 38.305 16.5.0 0077 - F NR\_pos-Core

Discussion:

Ericsson think we could remove the concerned sentence altogether. Nokia agree.

Qualcomm think we have the same sentence in all subsections of 5.3, and it is correct in the other cases; only 5.3.4 is an exception because of the involvement of UE-associated signalling. They think we could have organised it differently, but given the structure we have, they would prefer to correct the sentence instead of removing it.

Ericsson and Nokia can accept the CR.

* Agreed

[R2-2107958](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107958%20Correction%20on%20user-plane%20positioning%20support%20by%20SUPL_NR_final.docx) Correction on user-plane positioning support by SUPL Samsung, Qualcomm Incorporated CR Rel-16 38.305 16.5.0 0078 - F NR\_pos-Core

Discussion:

CATT are not sure about the ASN.1 part (extension marker in the first modified line).

* Email (merge into discussion [603])

[R2-2108410](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108410%20stage%202%20PRS%20Only%20TP.docx) PRS only TP for NR Ericsson CR Rel-16 38.305 16.5.0 0080 - F NR\_pos-Core

* Noted

### 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).

[R2-2107960](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107960%20Misalignment%20between%20RRC%20and%20NRPPa%20in%20SRS%20configuration_final.docx) Misalignment between RRC and NRPPa in SRS configuration Samsung discussion Rel-16

Proposal 1 RAN2 sends the LS to RAN3 to trigger the discussion on enabling the SRS-resource-level Spatial Relation Information/Periodicity configuration in NRPPa.

Discussion:

Ericsson agree that there is a misalignment and are OK to send an LS.

CATT also see the misalignment, but think it could be contribution-driven in RAN3.

Huawei agree with CATT that it could be discussed directly in RAN3; they actually have some doubt about the misalignment, because they understand that the LMF requests the configuration at the resource set granularity and the gNB sets the resource level configuration.

Qualcomm think it would be helpful for RAN2 to send an LS at least to ask for clarification; they recall that this issue was previously discussed in RAN3.

* LS to RAN3 to indicate that we have noticed the configurations are not aligned, and to ask if this was the intention.
* [AT115-e][605][POS] LS to RAN3 on SRS-PosResource configuration (Samsung)

Scope: Draft an LS to RAN3 on the configuration issue from R2-2107960.

Intended outcome: Approved LS in R2-2108935

Deadline: Tuesday 2021-08-24 0600 UTC

[R2-2107961](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107961%20Relation%20between%20pathlossReference%20and%20spatialRelationInfo_final.docx) Relation between pathlossReference and spatialRelationInfo Samsung discussion Rel-16

Proposal 1 RAN2 to have discussion on the relation between the pathlossReferenceRS-Pos and spatialRelationInfoPos fields that apply to a certain SRS-PosResource and how to clarify this.

Discussion:

vivo think the clarification is unnecessary and it can be handled in network implementation. Ericsson have the same view.

* Noted

### 6.3.3 LPP corrections

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

Summary document

[R2-2108808](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108808%20Summary%20of%206_3_3%20REL-16%20LPP%20Corrections%20v2_clean.docx) Summary of agenda item 6.3.3 - REL-16 LPP Corrections Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_pos-Core Late

Proposal 1: RAN2 is kindly requested to discuss and decide if the field bdsAdot-r16 in NavModel-BDS-KeplerianSet2-r16 IE correctly represents the value range for a 2s complement 25bit parameter.

Discussion:

Nokia indicate that a concern was expressed about the value range being correct, but they understand that offline checking has concluded that only the correction from the original CR is needed. CATT have the same understanding, and have also checked the ranges of the other parameters mentioned in email. Lenovo also agree.

* CR is agreed (R2-2107121)

Proposal 2: RAN2 to agree the CR in R2-2108363 containing changes to the need code for fields nr-SelectedDL-PRS-IndexListPerFreq, dl-SelectedPRS-ResourceSetIndexList, and dl-SelectedPRS-ResourceIndexList in IE NR-SelectedDL-PRS-IndexList and a correction of an incorrect IE name to NR-DL-PRS-AssistanceData.

* CR is agreed (R2-2108363)

Proposal 3: RAN2 is kindly requested to discuss and decide whether to relax the current guideline that the conditional and need tags are used in the downlink direction only or otherwise how to address the incorrect use of conditional tags and need codes in UL messages/IEs that are still present in the LPP specification.

Discussion:

Nokia clarify that we have one proposal to relax the restriction on the need codes, and one to remove the need codes on the timestamp IE.

Ericsson discussed with the RRC rapporteur and think it would be OK to relax the restriction, but we need to make the UE behaviour clear and avoid needing to specify the network behaviour. Especially with Need ON they have a concern that it should not be used to avoid specifying requirements on the NW, but they think conditional tags could be useful.

CATT would like simply to relax the restriction since it has less impact, and they think there are other cases of need codes in the uplink, but they could also accept checking the need codes individually.

vivo also prefer to follow the “downlink only” principle and avoid specifying network behaviour.

Huawei think this was previously discussed and at that time companies felt there was no issue; they wonder what has changed.

Lenovo think we can discuss if it makes sense to change the conditional codes, but for need codes in the uplink, they think the main concern is IEs that are used in both uplink and downlink; we need the need codes for the downlink case, but we could clarify that in such cases the need codes do not apply in the uplink.

Qualcomm think this has been in LPP since Rel-9 and has not caused problems, so they would prefer to change the guideline rather than touch all the field descriptions and risk creating issues in the spec or for implementation. They would be OK with a guideline that the need codes are not meaningful in the uplink direction.

Apple do not want to see large ASN.1 changes, but clarifying that need codes do not apply in the uplink is OK.

Ericsson found that the timestamp was the only IE where this was an issue, so they think we could handle it by fixing there, but can accept the guideline change.

* Modify the guideline to indicate that when need codes are used in the uplink, the associated requirements do not apply.
* [AT115-e][606][POS] LPP need code guidelines for uplink (CATT)

Scope: Update the guidelines for need codes in 37.355 in accordance with the principle that need codes are sometimes used in the uplink, but in this case the requirements are not applicable (i.e. we do not specify the network behaviour).

Intended outcome: Agreed CR in R2-2108936

Deadline: Tuesday 2021-08-24 0600 UTC

Proposal 4: RAN2 is kindly requested to first discuss and decide if a PRS-Only TP indication in DL-PRS assistance data is needed. If agreeable, RAN2 should also discuss if the addition of a new TP ID along with PRS-Only TP indication is needed. Other details in the CRs in R2-2107332 and R2-2108406 can be decided later once these two points are discussed and resolved.

Discussion:

No concerns expressed with adding the PRS-Only flag, although Nokia are not sure it is critical. Qualcomm think the UE should be able to know that it cannot find anything besides PRS from this TP, i.e. it should not search for SSB/MIB/SIB1, so they find it useful from the UE pov.

For the TP ID, Qualcomm have some doubts. They are also concerned about the other clarifications in the Huawei CR and think the UE should not be required to copy information from the assistance data into the measurement report.

Intel think based on the Qualcomm explanation, we may not need the bit because LPP is only attempting to indicate where the PRS should be found; the UE should not be taking normal cell re/selection actions based on the contents of LPP.

MediaTek see some value from the UE point of view in terms of knowing what not to expect from the TP.

Huawei think we have the flag in LTE for MBS, and the same situation applies here. For the contents of signalling, we agreed that the PCI/CGI was useful for identifying the PRS configuration, and they think it could be useful here for the UE to echo them in the uplink.

* Agree to have the PRS-only TP flag; other aspects can be discussed offline.
* [AT115-e][607][POS] PRS-only TP flag and other identifiers (Huawei)

Scope: Discuss the possibility of signalling cell identifiers for the PRS-only TP, and the proposal for including a TP-ID, and draft an agreeable CR.

Intended outcome: Agreeable CR in R2-2108937

Deadline: Tuesday 2021-08-24 0600 UTC

The following documents will not be individually treated online

[R2-2107121](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107121.docx) Correction for LPP assistance information ROHDE & SCHWARZ CR Rel-16 37.355 16.5.0 0312 - F NR\_pos-Core

* Agreed

[R2-2107227](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107227%20Discussion%20on%20the%20presence%20tag%20for%20Uplink%20LPP%20message.docx) Discussion on the presence tag for Uplink LPP message CATT discussion Rel-16 NR\_pos-Core

[R2-2107228](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\37355_CR0313_(Rel-16)_R2-2107228.doc) Corrections on the conditional presence tag clarification for Uplink LPP message CATT CR Rel-16 37.355 16.5.0 0313 - A NR\_pos-Core

[R2-2107229](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\37355_CR0314_(Rel-15)_R2-2107229.doc) Corrections on the conditional presence tag clarification for Uplink LPP message CATT CR Rel-15 37.355 15.2.0 0314 - F NR\_pos-Core

R2-2107230 Miscellaneous correction on the description of RequestedMeasurements CATT CR Rel-16 37.355 16.5.0 0315 - F NR\_pos-Core Withdrawn

[R2-2107332](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107332%20Correction%20to%20PRS-only%20TP.doc) Correction to PRS-only TP Huawei, HiSilicon CR Rel-16 37.355 16.5.0 0305 1 F NR\_pos-Core R2-2105054

[R2-2108363](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108363_(37355-g50%20Correction%20of%20Need%20Code).docx) Correction to the need code in NR-SelectedDL-PRS-IndexList Qualcomm Incorporated CR Rel-16 37.355 16.5.0 0318 - F NR\_pos-Core

* Agreed

[R2-2108404](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108404%20Discussion%20Need%20Code.docx) on Need codes and PRS-only TP Ericsson discussion

[R2-2108405](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108405%20CR%20Need%20code.docx) Correction of Need code for UE signalling of NR-TimeStamp Ericsson CR Rel-16 37.355 16.5.0 0319 - F NR\_pos-Core

[R2-2108406](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108406%20Addition%20of%20PRS%20Only%20TP.docx) Addition of PRS only TP Ericsson CR Rel-16 37.355 16.5.0 0320 - B NR\_pos-Core

### 6.3.4 MAC corrections

# 7 Rel-16 EUTRA Work Items

Essential corrections

## 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.

[R2-2107959](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107959%20Correction%20on%20user-plane%20positioning%20support%20by%20SUPL_LTE_final.docx) Correction on user-plane positioning support by SUPL Samsung, Qualcomm Incorporated CR Rel-16 36.305 16.3.0 0105 - F LCS\_LTE

# 8 Rel-17 NR Work Items

## 8.7 NR Sidelink relay

(NR\_SL\_Relay-Core; leading WG: RAN2; REL-17; WID: RP-211050)

Time budget: 2 TU

Tdoc Limitation: 7 tdocs

Email max expectation: 7 threads

### 8.7.1 Organizational

Incoming LSs, TS updates, rapporteur inputs. This AI is reserved for rapporteur and organizational inputs. Documents in this AI do not count towards the tdoc limitation.

The LS from SA2 in R2-2106967 (S2-2104932) that addresses a mix of sidelink relay and sidelink enhancement topics will initially be handled under this AI.

Work plan

[R2-2107192](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107192%20-%20Work%20planning%20for%20R17%20SL%20relay.docx) Work planning for R17 SL relay OPPO Work Plan Rel-17 NR\_SL\_relay-Core

Incoming LSs other than R2-2106967

[R2-2106973](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106973_S3-212204.doc) Reply LS on R17 Layer-2 SL Relay of UE ID exposure in paging mechanism (S3-212204; contact: Huawei) SA3 LS in Rel-17 NR\_SL\_relay-Core To:RAN2 Cc:SA2, CT1

LS from SA2 and related documents

[R2-2106967](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106967_S2-2104932.docx) LS on RAN dependency issues for 5G ProSe (S2-2104932; contact: CATT) SA2 LS in Rel-17 5G\_ProSe To:RAN2

[R2-2107193](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107193%20-%20Discussion%20on%20RAN2%20impact%20from%20S2-2104932.docx) Discussion on RAN2 impact from S2-2104932 OPPO LS out Rel-17 NR\_SL\_relay-Core To:SA2 Cc:RAN1

[R2-2107755](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107755.docx) Discuss SA2 LS on RAN dependency issues for 5G ProSe vivo discussion

[R2-2108150](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108150%20Draft%20LS%20reply%20on%20RAN%20dependency%20issues%20for%205G%20ProSe.doc) Draft LS reply on RAN dependency issues for 5G ProSe ZTE, Sanechips discussion Rel-17

[R2-2108675](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108675%20-%20Draft%20reply%20LS%20on%20RAN%20dependency%20issues%20for%205G%20ProSe.docx) Draft Relay LS on RAN dependency issues for 5G ProSe Qualcomm Incorporated LS out Rel-17 NR\_SL\_relay-Core To:SA2, RAN1

Running CRs

[R2-2107043](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Docs\R2-2107043.zip) Stage 2 Running CR on Introduction of R17 SL Relay MediaTek Inc. draftCR Rel-16 38.300 16.6.0 B NR\_SL\_relay-Core

[R2-2108194](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108194-%20Running%20CR%20of%2038.304%20for%20SL%20relay.docx) Running CR of 38.304 for SL relay Ericsson (Rapporteur) draftCR Rel-17 38.304 16.5.0 B NR\_SL\_relay-Core

[R2-2108627](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108627.docx) RRC running CR for SL relay Huawei, HiSilicon draftCR Rel-17 38.331 16.5.0 B NR\_SL\_relay-Core

### 8.7.2 L2 relay specific topics

No documents should be submitted to 8.7.2. Please submit to 8.7.2.x.

#### 8.7.2.1 Control plane procedures

Including connection management, SI delivery, paging, access control for remote UE. This agenda item will utilise a summary document.

Including outcome of [Post114-e][605][Relay] SI and paging forwarding (vivo)

Email discussion summary

[R2-2107756](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107756.docx) Summary of [Post114-e][605][Relay] SI and paging forwarding (vivo) vivo discussion

Summary document

[R2-2108824](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108824%20Summary%20of%208.7.2.1.docx) Summary of AI 8.7.2.1 Xiaomi Technology discussion Rel-17 NR\_SL\_relay-Core

The following documents will not be individually treated

[R2-2106989](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106989.docx) Control Plane Procedures of L2 Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2106990](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106990.docx) PO Monitoring for Relay UE in RRC\_CONNECTED and Remote UE in RRC\_IDLE/RRC\_INACTVE CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2107039](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107039-%20Discussion%20on%20Control%20Plane%20Aspects%20for%20L2%20Relay.docx) Discussion on Control Plane Aspects for L2 Relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2107044](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107044%20Stage%202%20level%20procedure%20for%20Connection%20Establishment.docx) Stage 2 level procedure for Connection Establishment MediaTek Inc. discussion Rel-17

[R2-2107045](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107045%20Remote%20UE%20Paging%20handling%20for%20connected%20Relay%20UE.docx) Remote UE Paging handling for connected Relay UE MediaTek Inc. discussion Rel-17

[R2-2107103](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107103%20-%20Further%20discussion%20on%20RRC%20connection%20management%20of%20L2%20U2N%20relay.doc) Further discussion on RRC connection management of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2107104](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107104%20-%20Further%20discussion%20on%20paging%20and%20SIB%20forwarding%20in%20L2%20U2N%20relay.doc) Further discussion on paging and SIB forwarding in L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2107176](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107176%20Remaining%20issues%20on%20RRC%20connection%20management.doc) Remaining issues on RRC connection management Samsung Electronics GmbH discussion

[R2-2107231](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107231%20Discussion%20on%20RRC%20connection%20management%20for%20L2%20sidelink%20relay.docx) Discussion on RRC connection management for L2 sidelink relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2107232](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107232%20SI%20forwarding%20and%20paging%20for%20L2%20sidelink%20relay.docx) SI forwarding and paging for L2 sidelink relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2107273](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107273%20(R17%20SL%20Relay%20SI_AI8721%20ConnEst%20Procedure).doc) Connection Establishment Procedure for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2107274](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107274%20(R17%20SL%20Relay%20SI_AI8721%20Paging).doc) Paging Procedures for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2107275](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107275%20(R17%20SL%20Relay%20SI_AI8721%20SI).doc) SI Forwarding for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2107304](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107304.doc) Discussion on paging forwarding for a remote UE SHARP Corporation discussion NR\_SL\_relay-Core

[R2-2107306](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107306_SLRelay_ConnMgt_Intel.docx) Remaining issues of L2 Relay connection management Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2107367](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107367%20Discussion%20on%20control%20plane%20procedures%20for%20L2%20U2N%20relay.doc) Discussion on control plane procedures for L2 U2N relay Spreadtrum Communications discussion Rel-17

[R2-2107541](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107541%20relay%20CP.docx) Configuration of Uu Interface for Sidelink Relay Futurewei discussion Rel-17 NR\_SL\_relay-Core

[R2-2107622](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107622%20Discussion%20on%20SIB%20forwarding%20.doc) Remaining issues on SIB forwarding for IDLE/INACTIVE remote UE Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2107623](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107623%20Discussion%20on%20Unified%20Access%20Control%20in%20Relay%20UE.doc) Unified Access Control on Relay UE Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2107625](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107625%20Discussion%20on%20RNA%20Update%20procedures%20in%20L2%20UE-to-NW%20Relay.doc) RNA Update via L2 UE-to-NW relay Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2107708](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107708%20SI%20message%20forwarding%20in%20L2%20U2N%20relay.doc) SI message forwarding in L2 U2N relay Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2107709](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107709%20Paging%20delivery%20via%20L2%20Relay%20in%20RRC_CONNECTED.doc) Paging delivery via L2 Relay in RRC\_CONNECTED Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2107757](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107757.docx) Way forward for L2 U2N Remote UE SRB0 SRB1 configuration vivo discussion

[R2-2107966](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107966%20Relay%20Discussion%20on%20SI%20and%20paging%20delivery.doc) Discussion on SI and paging delivery Xiaomi communications discussion

[R2-2107967](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107967%20Relay%20Connection%20control.doc) Discussion on connection control Xiaomi communications discussion

[R2-2108007](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108007%20SI%20acquisition,%20CN%20Registration%20and%20RNAU.doc) SI acquisition, CN Registration and RNAU Lenovo Mobile Com. Technology discussion Rel-17 NR\_SL\_relay-Core

[R2-2108008](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108008%20Monitoring%20Paging%20by%20a%20U2N%20Relay.doc) Monitoring Paging by a U2N Relay Lenovo Mobile Com. Technology discussion NR\_SL\_relay-Core

[R2-2108060](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108060.doc) L2 relay control plane procedures Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2108145](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108145%20Consideration%20on%20the%20connection%20management%20of%20SL%20relay.doc) Consideration on the connection management of SL relay ZTE, Sanechips discussion Rel-17

[R2-2108146](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108146%20Consideration%20on%20the%20system%20information%20acquisition%20and%20paging%20in%20SL%20relay.doc) Consideration on the system information acquisition and paging in SL relay ZTE, Sanechips discussion Rel-17

[R2-2108153](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108153-%20Control%20plane%20procedure%20-%20SIB%20delivery%20&%20paging.docx) SIB Delivery & Paging for Remote UE LG Electronics Inc. discussion Rel-17

[R2-2108154](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108154-Control%20plane%20procedure%20-%20Connection%20establishment.docx) Connection Establishment LG Electronics Inc. discussion Rel-17

[R2-2108156](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108156-Remote%20UE%20operation%20when%20Relay%20UE%20performs%20HO.docx) Relay reselection when Relay UE performs HO LG Electronics Inc. discussion Rel-17

[R2-2108192](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108192-%20Discussion%20on%20paging%20and%20SIB%20handling%20for%20L2%20sidelink%20relay.docx) Discussion on paging and SIB handling for L2 sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2108195](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108195-%20Discussion%20on%20RRC%20connection%20management%20procedures%20for%20L2%20SL%20relay.docx) Discussion on RRC connection management procedures for L2 SL relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2108414](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108414-Discussion%20on%20SI%20and%20paging%20forwarding.doc) Discussion on SI and paging forwarding ETRI discussion Rel-17 NR\_SL\_relay-Core

[R2-2108458](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108458%20Discussion%20on%20RRC%20connection%20establishment%20of%20remote%20UE%20in%20L2%20U2N%20relay.docx) Discussion on RRC connection establishment of remote UE in L2 U2N relay Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay-Core

[R2-2108462](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108462%20Support%20of%20idle%20mode%20mobility%20for%20remote-UE%20in%20SL%20U2N%20relay.docx) Support of idle mode mobility for remote-UE in SL UE-to-Nwk relay Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core R2-2103310

[R2-2108510](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108510%20Control%20plane%20procedure.docx) Control plane procedure CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2108734](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108734_SLRelay_SI_Intel.docx) Leftover issues for SI delivery in L2 Relay Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2108820](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108820%20Discussion%20on%20SI%20reception%20before%20establishing%20PC5-RRC%20connection.docx) Discussion on SI reception before establishing PC5-RRC connection MediaTek Inc. discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.2.2 Service continuity

Service continuity between Uu and relay paths, limited to intra-gNB cases. This agenda item will utilise a summary document.

Remaining proposals from RAN2#114-e

[R2-2107710](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107710%20Remaining%20easy%20proposals%20in%20outcome%20of%20%5bAT114-e%5d%5b605%5d%5bRelay%5d.doc) Remaining easy proposals in outcome of [AT114-e][605][Relay] Samsung(email discussion rapporteur) discussion Rel-17 NR\_SL\_relay-Core

Summary document

[R2-2108196](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108196-%20Feature%20summary%20for%20AI%208.7.2.2.docx) Feature summary of AI 8.7.2.2. Ericsson discussion Rel-17 NR\_SL\_relay-Core Late

The following documents will not be individually treated

[R2-2106991](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106991.docx) Service Continuity for L2 U2N Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2107046](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107046%20Stage%202%20level%20procedure%20for%20Service%20Continuity.docx) Stage 2 level procedure for Service Continuity MediaTek Inc. discussion Rel-17

[R2-2107106](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107106%20-%20Service%20continuity%20of%20L2%20U2N%20relay.doc) Further discussion on Service continuity of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2107196](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107196%20-%20Left%20issues%20on%20UP%20aspects%20for%20service%20continuity_v2.docx) Left issues on UP aspects for service continuity OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2107213](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107213%20Discussion%20on%20CP%20of%20NR%20sidelink%20relay%20service%20continuity.docx) Discussion on CP of NR sidelink relay service continuity OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2107276](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107276%20(R17%20SL%20Relay%20SI_AI8722%20Service_Continuity).doc) Service Continuity for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2107309](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107309_SLRelay_ServiceContinuity_Intel.docx) Open aspects of Service continuity support for L2 U2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2107452](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107452%20Remaining%20issues%20on%20service%20continuity%20in%20L2%20relaying.docx) Remaining Issues on Service Continuity in L2 relaying vivo discussion

[R2-2107540](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107540%20service%20continuity.docx) Open Issues in Switches between Direct and Indirect Paths Futurewei discussion Rel-17 NR\_SL\_relay-Core

[R2-2107621](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107621%20service%20continuity.doc) Discussion on service continuity for Layer 2 UE-to-NW relay Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2107711](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107711%20Remaining%20issues%20in%20Remote%20UE%20path%20switch%20procedures.doc) Remaining issues in Remote UE path switch procedures Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2107887](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107887%20Path%20switching%20in%20L2%20U2N%20relay%20v1.2.doc) Path switching in L2 U2N relay case Lenovo, Motorola Mobility discussion Rel-17

[R2-2107888](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107888%20Service%20continuity%20with%20relay%20reselection%20v1.1.doc) Service continuity with relay reselection Lenovo, Motorola Mobility discussion Rel-17

[R2-2107949](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107949%20L2%20Relay%20handover%20to%20non-L2-Relay%20capable%20gNB.docx) L2 Relay handover to non-L2-Relay capable gNB Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2107965](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107965%20Relay%20Discussion%20on%20service%20continuity.doc) Discussion on service continuity Xiaomi communications discussion

[R2-2108061](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108061.doc) Service continuity open issues in L2 NR sidelink rela Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2108147](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108147%20Discussion%20on%20SL%20relay%20service%20continuty.doc) Discussion on the service continuity of SL relay ZTE, Sanechips discussion Rel-17

[R2-2108155](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108155-Relay%20(re)selection%20for%20service%20continuity.docx) Relay (re)selection for service continuity LG Electronics Inc. discussion Rel-17

[R2-2108157](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108157-Service%20continuity%20-%20measurement%20and%20report%20for%20path%20switching.docx) Measurement and report for path switching LG Electronics Inc. discussion Rel-17

[R2-2108193](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108193-%20Discussion%20on%20service%20continuity%20for%20L2%20sidelink%20relay.docx) Discussion on service continuity for L2 sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2108282](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108282.doc) Remaining issues on service continuity of SL relay China Telecommunications discussion

[R2-2108322](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108322_service_continuity.doc) Open issues on service continuity for relaying Kyocera discussion Rel-17

[R2-2108464](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108464%20Handover%20interruption%20time%20reduction%20using%20sidelink%20communication.docx) Handover interruption time reduction using sidelink communication Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay-Core

[R2-2108513](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108513%20Service%20continuity%20for%20L2%20relay.docx) Service continuity for L2 relay CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2108622](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108622%20Discussion%20on%20service%20continuity%20for%20L2%20UE%20to%20NW%20Relay.docx) Discussion on service continuity for L2 UE to NW Relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.2.3 Adaptation layer design

Including bearer mapping, remote UE identification, security aspects if any. This agenda item will utilise a summary document.

Summary document

[R2-2108484](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108484%20Summary_of_8_7_2_3_v2.doc) Summary for Relay Adaptation Layer - AI 8.7.2.3 InterDigital France R&D, SAS discussion Rel-17 Late

The following documents will not be individually treated

[R2-2106992](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106992.docx) Adaption Layer Design for L2 U2N Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2107047](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107047%20Adaptation%20layer%20for%20PC5%20at%20L2%20UE-to-Network%20Relay.docx) Adaptation layer for PC5 at L2 UE-to-Network Relay MediaTek Inc., InterDigital discussion Rel-17

[R2-2107105](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107105%20-%20Further%20discussion%20adaptation%20layer%20of%20L2%20U2N%20relay.doc) Further discussion on adaptation layer of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2107175](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107175%20Open%20issues%20with%20Adaptation%20layer%20design.doc) Open issues with Adaptation layer design Samsung Electronics GmbH discussion

[R2-2107194](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107194%20-%20Left%20issues%20on%20CP%20aspects%20for%20adaptation%20layer.docx) Left issues on CP aspects for adaptation layer OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2107195](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107195%20-%20Left%20issues%20on%20UP%20aspects%20for%20adaptation%20layer.docx) Left issues on UP aspects for adaptation layer OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2107277](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107277%20(R17%20SL%20Relay%20WI_AI8723%20Protocol%20Architectures)%20.doc) Discussion on L2 Relay Architecture InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2107307](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107307_SLRelay_adaptation_layer_Intel.docx) L2 U2N relaying Adaptation layer design aspects Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2107356](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107356.doc) Remaining issues on adaptation layer for L2 relay Spreadtrum Communications discussion Rel-17

[R2-2107451](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107451%20Adaptation%20Layer%20for%20L2%20SL%20Relay.docx) Adaptation Layer for L2 SL Relay vivo discussion

[R2-2107470](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107470%20-UP%20aspects%20on%20Layer%202%20SL%20relay.docx) UP aspects on Layer 2 SL relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2107620](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107620%20PC5-Adaptation-header.doc) Discussion on adaptation header in PC5 link Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2107734](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107734%20adaptation%20layer.docx) Remaining Issues in Adaptation Layer Design Futurewei discussion Rel-17 NR\_SL\_relay-Core

[R2-2108148](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108148%20Discussion%20on%20adaptation%20layer%20design.doc) Discussion on adaptation layer design ZTE, Sanechips discussion Rel-17

[R2-2108250](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108250%20%20-%20SRB0_SRB1_Adaptation.docx) Sidelink Relay Uu RLC for Remote UE and Adaptation Layer Design Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2108466](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108466%20Discussion%20on%20Uu%20adaptation%20layer%20in%20L2%20UE-to-NW%20relay.docx) Discussion on Uu adaptation layer in L2 UE-to-NW relay Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay-Core R2-2106054

[R2-2108511](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108511%20Adaption%20layer%20for%20L2%20U2N%20relay.docx) Adaption layer for L2 U2N relay CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2108623](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108623%20Adaptation%20layer%20functionalities%20for%20L2%20U2N%20relay.docx) Adaptation layer functionalities for L2 U2N relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.2.4 QoS

Mechanisms for E2E QoS management. This AI will be treated on a time-available basis. This agenda item will utilise a summary document.

Summary document

[R2-2109018](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2109018%20-%20Summary%20on%208.7.2.4.doc) [Pre115-e][605][Relay] Summary of AI 8.7.2.4 QoS (Apple) Apple discussion Rel-17 NR\_SL\_relay-Core

The following documents will not be individually treated

[R2-2106993](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106993.docx) End-to-end QoS Management for L2 Sidelink Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2107040](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107040%20-%20QoS%20management%20for%20L2%20U2N%20relay_V2.docx) Discussion on resource allocation and QoS management for L2 U2N relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2107107](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107107%20-%20Discussion%20on%20E2E%20QoS%20enforcement%20in%20L2%20U2N%20relay.doc) Discussion on E2E QoS enforcement in L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2107278](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107278%20(R17%20SL%20Relay%20WI_AI8724%20QoS)%20.doc) Discussion on QoS for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2107308](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107308_SLRelay_QoS_Intel.docx) E2E QoS management considerations for L2 U2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2107471](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107471%20-%20Aspects%20for%20QoS%20management%20with%20SL%20relay.docx) Aspects for QoS management with SL relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2107497](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107497-%20E2E%20QoS%20Provisioning%20with%20L2%20Sidelink%20Relay.docx) E2E QoS Provisioning with L2 Sidelink Relay Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2107624](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107624%20QOS%20for%20Layer%202%20UE-to-NW%20relay.doc) QoS enhancements for UE-to-NW relay Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2107712](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107712%20QoS%20management%20aspects%20for%20L2%20U2N%20relay.doc) QoS management aspects for L2 U2N Relay Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2107758](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107758.docx) Mechanisms for E2E QoS management vivo discussion

[R2-2107833](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107833_Considerations%20on%20voice%20and%20video%20support%20for%20Relays.docx) Considerations on voice and video support for Relays Philips International B.V., MediaTek, Vivo, FirstNet discussion Rel-17 NR\_SL\_relay-Core

[R2-2108149](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108149%20Discussion%20on%20QoS%20of%20Sidelink%20relay.doc) Discussion on QoS of SL relay ZTE, Sanechips discussion Rel-17

[R2-2108512](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108512%20Mechanisms%20for%20E2E%20QoS%20management.docx) Mechanisms for E2E QoS management CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2108624](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108624%20QoS%20management%20of%20L2%20U2N%20relay.docx) QoS management of L2 U2N relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2108821](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108821%20On%20recommended%20bit%20rate.docx) On recommended bit rate MediaTek Inc. discussion Rel-17 NR\_SL\_relay-Core

### 8.7.3 L2/L3 common topics

For any remaining stage 3 issues related to discovery and (re)selection. No documents should be submitted to 8.7.3. Please submit to 8.7.3.x.

#### 8.7.3.1 Relay discovery

Re-using LTE discovery as baseline. This agenda item may utilise a summary document (decision to be made based on submitted tdocs).

[R2-2106994](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106994.docx) Leftover Issues for Sidelink Discovery CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2107089](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107089%20-%20Remaining%20issues%20on%20relay%20discovery.doc) Remaining issues on relay discovery Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2107212](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107212%20Discussion%20on%20remaining%20issue%20of%20relay%20discovery.docx) Discussion on remaining issue of relay discovery OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2107279](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107279%20(R17%20SL%20Relay%20WI_AI8731%20Discovery).doc) Remaining Issues on Discovery InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2107313](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107313.docx) Leftover aspects of Relay discovery Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2107468](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107468%20-%20Left%20issues%20for%20SL%20discovery.docx) Left issues for SL discovery Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2107713](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107713%20Resource%20allocation%20for%20SL%20relay%20discovery%20message.doc) Resource allocation for SL relay discovery message Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2107759](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107759.docx) Remaining issues on Relay Discovery vivo discussion

[R2-2107889](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107889%20Relay%20Discovery%20in%20L2%20and%20L3%20relay%20case%20v1.1.doc) Relay Discovery for L2 and L3 relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2107950](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107950%20Further%20Issues%20on%20discovery%20for%20NR%20Sidelink%20Relay.docx) Further issues on the discovery message for NR sidelink relay Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2108143](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108143%20Further%20discussion%20on%20relay%20discovery.doc) Further discussion on Relay discovery ZTE, Sanechips discussion Rel-17

[R2-2108152](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108152-Relay%20Discovery%20for%20stage%203.docx) Relay Discovery transmission for stage 3 LG Electronics Inc. discussion Rel-17

[R2-2108251](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108251%20-%20SharedvDedicated%20Resource%20Pools.docx) Relay Discovery Resource Pool Utilisation Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2108324](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108324_discovery_coexistence.doc) Coexistence of discovery resource pools Kyocera discussion Rel-17

[R2-2108626](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108626%20Remaining%20issue%20on%20relay%20discovery.docx) Remaining issue on relay discovery Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.3.2 Relay re/selection

Re-using LTE re/selection as baseline. This agenda item may utilise a summary document (decision to be made based on submitted tdocs).

[R2-2106995](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106995.docx) New Triggers for Relay Reselection CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2107102](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107102%20-%20Remaining%20issues%20on%20relay%20(re)selection.doc) Remaining issues on relay (re)selection Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2107305](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107305_SL%20Relay%20Reselection_Intel.docx) Leftover aspects of Relay reselection Intel Corporation discussion Rel-17

[R2-2107469](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107469%20-%20Aspects%20for%20SL%20relay%20selection%20and%20reselection.docx) Aspects for SL relay selection and reselection Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2107760](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107760.docx) Remaining issues on Relay (re)selection vivo discussion

[R2-2107872](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107872%20Discussion%20on%20sidelink%20relay%20reselection.doc) Discussion on sidelink relay reselection SHARP Corporation discussion

[R2-2107890](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107890%20Relay%20(re)selection%20in%20L2%20and%20L3%20relay%20case%20v1.1.doc) Relay (re)selection for L2 and L3 relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2108144](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108144%20Further%20discussion%20on%20relay%20selection.doc) Further discussion on Relay selection ZTE, Sanechips discussion Rel-17

[R2-2108252](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108252%20-%20Cell%20ID%20L2%20Relay%20(Re)selection.docx) Use of Cell ID in Sidelink L2 Relay (Re)selection Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2108467](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108467%20Discussion%20on%20UE-to-Nwk%20Relay%20Enhancement%20for%20mobility%20operation.docx) Discussion on sidelink assisted mobility using UE-to-Nwk Relay Nokia, Nokia Shanghai Bell discussion

[R2-2108625](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108625%20Discussion%20on%20relay%20reselection.docx) Discussion on relay reselection Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2108706](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108706%20Remaining%20issues%20for%20L2%20U2N%20relay%20(re)selection.docx) Remaining issues for L2 U2N relay (re)selection MediaTek Inc. discussion Rel-17

## 8.11 NR positioning enhancements

(NR\_pos\_enh-Core; leading WG: RAN1; REL-17; WID: RP-210903)

Time budget: 2 TU

Tdoc Limitation: 7 tdocs

Email max expectation: 7 threads

### 8.11.1 Organizational

Rapporteur input. Incoming LS etc. This AI is reserved for rapporteur and organizational inputs; documents in this AI do not count towards the tdoc limitation.

Incoming LSs with RAN2 in Cc:

[R2-2106913](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106913_R1-2106202.docx) LS on support of UL-AOA/ZOA assistance information signalling for NR positioning (R1-2106202; contact: Intel) RAN1 LS in Rel-17 NR\_pos\_enh-Core To:RAN3 Cc:RAN2

[R2-2106918](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106918_R1-2106312.docx) Reply LS to SA2 on Scheduling Location in Advance (R1-2106312; contact: Qualcomm) RAN1 LS in Rel-17 NR\_pos\_enh To:SA2 Cc:RAN2, RAN3

Incoming LS on PRUs

[R2-2106920](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106920_R1-2106326.docx) LS on Positioning Reference Units (PRUs) for enhancing positioning performance (R1-2106326; contact: CATT) RAN1 LS in Rel-17 NR\_pos\_enh To:RAN2, RAN3 Cc:SA2

Incoming LS on local coordinates

[R2-2106969](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106969_S2-2105124.docx) LS on determination of location estimates in local co-ordinates (S2-2105124; contact: Ericsson) SA2 LS in Rel-17 5G\_eLCS\_ph2 To:RAN1, RAN2, RAN3

Incoming LSs on latency enhancement topics

[R2-2106919](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106919_R1-2106316.docx) LS on granularity of response time (R1-2106316; contact: Huawei) RAN1 LS in Rel-17 NR\_pos\_enh To:RAN2

[R2-2106968](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2106968_S2-2105122.docx) Response LS on Scheduling Location in Advance to reduce Latency (S2-2105122; contact: CATT) SA2 LS in Rel-17 5G\_eLCS\_ph2 To:RAN2 Cc:RAN1, RAN3

[R2-2106971](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Docs\R2-2106971.zip) LS on storage of UE Positioning Capabilities (S2-2105153; contact: Qualcomm) SA2 LS in Rel-17 5G\_eLCS\_ph2 To:RAN2 Cc:RAN3

Draft replies

[R2-2107133](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107133%20Draft%20Response%20LS%20to%20SA2%20on%20the%20scheduled%20location%20time.docx) Draft Response LS to SA2 on the scheduled location time CATT LS out Rel-17 NR\_pos\_enh-Core To:SA2 Cc:RAN1, RAN3

[R2-2107144](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107144.docx) Draft Response LS to RAN1 on the Positioning Reference Units (PRUs) for positioning enhancement CATT LS out Rel-17 NR\_pos\_enh-Core To:RAN1 Cc:RAN3

[R2-2108401](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108401%20local%20co-ordinates.docx) Local Co-ordinates support for Positioning methods Ericsson discussion

[R2-2108402](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108402%20LS%20SA2%20local.docx) [Draft] Reply LS on determination of location estimates in local co-ordinates Ericsson LS out To:SA2 Cc:RAN1, RAN3

Running CR related topics

[R2-2107674](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107674%20Consideration%20on%20stage%202%20structure%20on%20RAT%20dependent%20positioning.docx) Consideration on stage 2 structure on RAT dependent positioning Intel Corporation discussion Rel-17 NR\_pos\_enh

### 8.11.2 Latency enhancements

Enhancements of signalling, and procedures for improving positioning latency of the Rel-16 NR positioning methods, for DL and DL+UL positioning methods. This agenda item will utilise a summary document.

Summary document

[R2-2107680](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107680%20-%20Summary%20of%20AI%208.11.2%20Latency%20enhancements%20(Intel).docx) "Summary of agenda 8.11.2 Latency enhancements" Intel Corporation discussion Rel-17 NR\_pos\_enh Late

The following documents will not be individually treated

[R2-2107090](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107090%20Discussion%20on%20positioning%20latency%20reduction.docx) Discussion on positioning latency reduction ZTE discussion

[R2-2107091](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107091%20Discussion%20on%20scheduled%20location%20time.docx) Discussion on scheduled location time ZTE discussion

[R2-2107132](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107132%20Discussion%20on%20Response%20LS%20on%20Scheduling%20Location.docx) Discussion on Response LS on Scheduling Location in Advance to reduce Latency from SA2 CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2107134](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107134%20Discussion%20on%20Enhancements%20for%20Latency%20Reduction.docx) Discussion on Enhancements for Latency Reduction CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2107135](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107135.docx) Discussion on storage of UE Positioning Capabilities LS from SA2 and the granularity of response time LS from RAN1 CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2107399](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Docs\R2-2107399.zip) Further consideration of positioning latency enhancements OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2107500](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107500%20Discussion%20on%20positioning%20latency.docx) Discussion on positioning latency Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2107641](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107641%20Discussion%20on%20latency%20enhancement.docx) Discussion on latency enhancement vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2107642](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107642%20Discussion%20on%20Scheduling%20Location%20in%20Advance%20to%20reduce%20Latency.docx) Discussion on Scheduling Location in Advance to reduce Latency vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2107670](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107670.docx) Scheduled location time based latency reduction Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2107673](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107673%20Storing%20UE%20positioning%20capability%20in%20AMF.docx) Storing UE positioning capability in AMF Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2107681](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107681%20(R17%20NR%20POS%20WI_AI8112_Latency).doc) Discussion on Enhancements for Latency Reduction InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2107962](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107962%20Discussion%20on%20the%20response%20time_final.docx) Discussion on the response time Samsung discussion Rel-17

[R2-2108127](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108127_PosLatencyReduction_LenMM.docx) Positioning Latency Reduction Enhancements Lenovo, Motorola Mobility discussion Rel-17

[R2-2108175](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108175%20Positioning%20enhancements%20on%20latency%20reduction.doc) Positioning enhancements on latency reduction Xiaomi discussion

[R2-2108367](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108367_(Scheduling%20Location%20in%20Advance).docx) Scheduling Location in Advance to Reduce Latency Qualcomm Incorporated discussion

[R2-2108376](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108376_(Response%20LS%20to%20SA2%20on%20on%20Scheduling%20Location%20in%20Advance).docx) [draft] Response LS on Scheduling Location in Advance to reduce Latency Qualcomm Incorporated LS out Rel-17 FS\_NR\_pos\_enh To:SA2 Cc:RAN1, RAN3

[R2-2108377](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108377_(Pos%20Capabilities).docx) LPP impacts for UE positioning capability storage Qualcomm Incorporated discussion

[R2-2108378](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108378_(Response%20LS%20to%20SA2%20on%20storage%20of%20UE%20Positioning%20Capabilities).docx) [draft] Response LS on storage of UE Positioning Capabilities Qualcomm Incorporated LS out Rel-17 To:SA2 Cc:RAN3

[R2-2108393](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108393%20latency.docx) Utilizing Time T and other associated parameters Ericsson discussion

[R2-2108397](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108397%20Positioning%20Capabilities.docx) On UE Positioning Capabilities Ericsson discussion

[R2-2108536](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108536%20Discussion%20on%20latency%20reduction%20for%20positioning.docx) Discussion on latency reduction for positioning CMCC discussion Rel-17 NR\_pos\_enh-Core

[R2-2108704](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108704%20Enhancement%20to%20reduce%20latency%20for%20high%20volume%20positioning.docx) Enhancement to reduce latency for high volume positioning Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2108769](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108769%20(8.11.2)%20Handling%20of%20multiple%20QoS%20for%20latency%20reduction.docx) Handling of multiple QoS for latency reduction Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2108771](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108771%20(8.11.2)%20Latency%20reduction%20via%20configured%20grant%20for%20positioning%20.docx) Latency reduction via configured grant for positioning Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2108773](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108773%20(8.11.2)Discussion%20on%20the%20scheduled%20location%20time.docx) Discussion on the scheduled location time Samsung Electronics discussion NR\_pos\_enh-Core

### 8.11.3 RRC\_INACTIVE

Methods, measurements, signalling and procedures to support positioning for UEs in RRC\_ INACTIVE state, for UE-based and UE-assisted positioning solutions. UL and DL+UL NR positioning methods and gNB positioning measurements for UEs in RRC\_INACTIVE are treated at lower priority. This agenda item will utilise a summary document.

Including outcome of [Post114-e][602][POS] Stage 2 procedure for deferred MT-LR in RRC\_INACTIVE (Qualcomm)

Email discussion summary

[R2-2108383](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108383_(%5bPost114-e%5d%5b602%5d%5bPOS%5d%20Inactive)_Summary.doc) Summary of [Post114-e][602][POS] Stage 2 procedure for deferred MT-LR in RRC\_INACTIVE Qualcomm Incorporated discussion Late

Summary document

[R2-2108826](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108826%20Summary%20of%20AI%208.11.3%20for%20RRC_INACTIVE%20positioning(ZTE).docx) Summary of AI 8.11.3 for RRC INACTIVE positioning ZTE discussion

Way forward proposal

[R2-2108605](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108605%20Way-forward%20on%20INACTIVE%20positioning_v06.docx) Way-forward for INACTIVE positioning Huawei, China Unicom, China Telecom, Futurewei, HiSilicon, Intel Corporation, Interdigital, Spreadtrum Communications, VIVO, Xiaomi, ZTE Corporation discussion Rel-17 NR\_pos\_enh-Core Late

The following documents will not be individually treated

[R2-2107092](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107092%20Discussion%20on%20positioning%20in%20RRC%20INACTIVE%20state.docx) Discussion on positioning in RRC INACTIVE state ZTE discussion

[R2-2107093](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107093%20Stage%202%20procedures%20for%20positioning%20in%20RRC%20INACTIVE%20state.docx) Stage 2 procedures for positioning in RRC INACTIVE state ZTE discussion

[R2-2107142](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107142%20Positioning%20for%20UEs%20in%20RRC_INACTIVE%20state.docx) Discussion on Positioning for UEs in RRC\_INACTIVE state CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2107149](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107149_RRC_INACTIVE_Fraunhofer.docx) Considerations on positioning in RRC\_INACTIVE mode Fraunhofer IIS; Fraunhofer HHI discussion

[R2-2107358](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107358%20-%20Discussion%20on%20positioning%20in%20RRC_INACTIVE%20state.docx) Discussion on positioning in RRC\_INACTIVE state Spreadtrum Communications discussion Rel-17

[R2-2107502](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107502%20Draft%20LS%20to%20SA2%20on%20INACTIVE%20positioning.docx) [DRAFT] LS on positioning for the UE in RRC\_INACTIVE Huawei, HiSilicon LS out Rel-17 NR\_pos\_enh-Core To:SA2

[R2-2107639](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107639%20Positioning%20Procedures%20in%20RRC_INACTIVE%20(stage-2)%20-%20v2.docx) Positioning procedures in RRC\_INACTIVE (stage-2) Apple discussion Rel-17 NR\_pos\_enh-Core

[R2-2107643](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107643%20Enhancement%20of%20DL%20positioning%20in%20RRC_INACTIVE.docx) Enhancement of DL positioning in RRC\_INACTIVE vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2107644](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107644%20Configuration%20of%20UL%20positioning%20in%20RRC_INACTIVE.docx) Configuration of UL positioning in RRC\_INACTIVE vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2107671](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107671%20Support%20of%20Positioning%20in%20RRC_INACTIVE.docx) Support of Positioning in RRC\_INACTIVE Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2107683](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107683%20(R17%20NR%20POS%20WI%20AI8113_INACTIVE_AD).doc) Discussion on Positioning in RRC INACTIVE state InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2107684](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107684%20(R17%20NR%20POS%20WI%20AI8113_INACTIVE_SDT).doc) Discussion on reporting of Positioning Information with SDT InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2107829](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107829-%20Supporting%20positioning%20in%20RRC_INACTIVE%20state.docx) Supporting positioning in RRC\_INACTIVE state OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2107830](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107830-%20Discussion%20on%20UL%20Positioning%20methods%20in%20RRC_INACTIVE%20state.docx) Discussion on UL Positioning methods in RRC\_INACTIVE state OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2108068](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108068_Pos_Inactive.docx) Considerations on positioning RRC Inactive Sony discussion Rel-17 NR\_pos\_enh-Core R2-2105703

[R2-2108128](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108128_RRCInactive_Positioning_LenMM.docx) On Positioning in RRC\_INACTIVE state Lenovo, Motorola Mobility discussion Rel-17

[R2-2108173](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108173%20Discussion%20on%20positioning%20for%20UEs%20in%20RRC%20Inactive.doc) Discussion on positioning for UEs in RRC Inactive Xiaomi discussion

[R2-2108394](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108394%20Inactive%20mode.docx) Inactive mode Positioning Ericsson discussion

[R2-2108703](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108703%20Considerations%20on%20positioning%20in%20RRC_INACTIVE.docx) Considerations on positioning in RRC\_INACTIVE Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2108764](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108764%20Considerations%20on%20Positioning%20in%20RRC_INACTIVE%20state.docx) Considerations on Positioning in RRC\_INACTIVE state CMCC discussion Rel-17 NR\_pos\_enh-Core Late

[R2-2108772](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108772%20(8.11.3)%20On%20message%20segmentation%20for%20transmitting%20in%20Inactive%20state.docx) On message segmentation for transmitting in Inactive state Samsung Electronics discussion NR\_pos\_enh-Core

### 8.11.4 On-demand PRS

Specify UE-initiated and LMF-initiated on-demand transmission and reception of DL PRS for DL and DL+UL positioning for UE-based and UE-assisted positioning solutions. This agenda item will utilise a summary document.

Including outcome of [Post114-e][603][POS] Procedures and signalling for on-demand PRS (Ericsson)

Email discussion summary

[R2-2108400](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108400%20onDemand%20PRS%20email.docx) Report on [Post114-e][603][POS] Procedures and signalling for on-demand PRS (Ericsson) Ericsson discussion Late

Summary document

[R2-2108827](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108827%20Summary%20of%20AI%208.11.4%20On-demand%20PRS.docx) Summary of Agenda Item 8.11.4 On-demand PRS CATT discussion Rel-17 NR\_pos\_enh-Core

The following documents will not be individually treated

[R2-2107094](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107094%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS ZTE discussion

[R2-2107148](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107148_OnDemandPRS_Fraunhofer.docx) On-demand PRS Fraunhofer IIS, Fraunhofer HHI discussion Rel-17 R2-2105734

[R2-2107498](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107498%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2107638](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107638%20On%20Demand%20PRS%20-%20v1.docx) Remaining issues of On-Demand PRS Apple discussion Rel-17 NR\_pos\_enh-Core

[R2-2107645](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107645%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2107672](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107672.docx) Support of on-demand PRS request Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2107686](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107686%20(R17%20NR%20POS%20WI_AI8114_OnDemand_DL).doc) Discussion on procedures for On-demand PRS for DL-based positioning InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2107687](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107687%20(R17%20NR%20POS%20WI_AI8114_OnDemand_DL+UL).doc) Discussion on procedure for On-demand PRS for DL+UL based positioning InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2107828](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107828-%20Discussion%20on%20on-demand%20DL-PRS.doc) Discussion on on-demand DL-PRS OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2108069](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108069_Pos_PRS_Ondemand.docx) Considerations on positioning PRS On-demand Sony discussion Rel-17 NR\_pos\_enh-Core R2-2105704

[R2-2108129](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108129_On-DemandPRS_LenMM.docx) Support of On-Demand DL-PRS Lenovo, Motorola Mobility discussion Rel-17

[R2-2108174](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108174%20Positioning%20enhancement%20to%20on-demand%20DL%20PRS%20.doc) Positioning enhancement to on-demand DL PRS Xiaomi discussion

[R2-2108384](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108384_(On-demand%20PRS).docx) On-Demand DL-PRS Qualcomm Incorporated discussion

[R2-2108395](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108395%20On%20Demand.docx) On demand PRS Ericsson discussion R2-2105969

[R2-2108705](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108705%20On-demand%20PRS%20UE%20feedback%20NR%20ECID.docx) NR E-CID for UE feedback for on-demand PRS Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2108774](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108774%20(8.11.4)%20Multiple%20QoS%20class%20using%20on-demand%20PRS%20%20.docx) Multiple QoS class using on-demand PRS Samsung Electronics discussion NR\_pos\_enh-Core

### 8.11.5 GNSS positioning integrity

Signalling, and procedures to support GNSS positioning integrity determination. This agenda item will utilise a summary document.

Including outcome of [Post114-e][601][POS] GNSS integrity assistance information, KPIs, and reporting of integrity results (Swift)

Email discussion summary

[R2-2107989](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107989%20-%20%5bPost114-e%5d%5b601%5d%5bPOS%5d%20GNSS%20Integrity_Summary.docx) Email Summary [Post114-e][601][POS] GNSS integrity assistance information, KPIs, and reporting of integrity results (Swift) Swift Navigation discussion

Summary document

[R2-2109029](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2109029_(Summary%20GNSS%20Integrity)_v2.docx) Summary on agenda item 8.11.5 on GNSS positioning integrity Qualcomm Incorporated discussion

The following documents will not be individually treated

[R2-2107095](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107095%20Discussion%20on%20positioning%20integrity.docx) Discussion on positioning integrity ZTE discussion

[R2-2107136](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107136%20Discussion%20on%20Integrity%20KPIs%20impact%20and%20draft%20LS.docx) Discussion on Integrity KPIs impact and draft LS CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2107147](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107147_UE_Integrity_Fraunhofer_Ericsson_v2.0.docx) UE-aided detection of threat to GNSS systems and assistance data signaling Fraunhofer IIS; Fraunhofer HHI; Ericsson discussion R2-2105735

[R2-2107398](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Docs\R2-2107398.zip) Discussion on supporting positioing integrity in RAN OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2107499](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107499%20Discussion%20on%20positioning%20integrity.docx) Discussion on positioning integrity Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2107503](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107503%20Text%20Proposal%20for%20GNSS%20integrity.docx) Text Proposal for GNSS integrity Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2107646](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107646%20Discussion%20on%20signalling%20and%20procedures%20for%20GNSS%20positioning%20integrity.docx) Discussion on signalling and procedures for GNSS positioning integrity vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2107688](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107688%20(R17%20NR%20POS%20WI%20AI8115_GNSS_Integrity).doc) Discussion on procedures and signalling for GNSS positioning integrity InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2108024](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108024%20Positioning%20Integrity%20Support.docx) Positioning Integrity Support in LPP Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_pos\_enh

[R2-2108176](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108176%20Discussion%20on%20GNSS%20positioning%20integrity.doc) Discussion on GNSS positioning integrity Xiaomi discussion

[R2-2108340](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108340%20Bounding%20GNSS%20errors%20for%20positioning%20integrity.docx) Bounding GNSS errors for positioning integrity ESA, Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_pos\_enh

[R2-2108385](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108385_(Integrity).docx) Considerations on GNSS positioning integrity support Qualcomm Incorporated discussion

[R2-2108396](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108396%20GNSS%20Integrity.docx) GNSS positioning integrity Ericsson discussion R2-2105970

[R2-2108474](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108474%20-%20Discussion%20on%20GNSS%20Integrity.docx) Discussion on GNSS Integrity Assistance Data Swift Navigation, Ericsson, Mitsubishi Electric Corporation discussion Rel-17

[R2-2108475](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108475%20-%20TP%20on%20GNSS%20Integrity.docx) Text Proposal on GNSS Integrity Assistance Data Swift Navigation, Ericsson, Mitsubishi Electric Corporation discussion Rel-17

[R2-2108770](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108770%20(8.11.5)%20Consideration%20on%20the%20signalling%20design%20for%20Positioning%20Integrity.docx) Consideration on the signalling design for Positioning Integrity Samsung Electronics discussion NR\_pos\_enh-Core

### 8.11.6 A-GNSS enhancements

Including support of BDS B2a and B3I signals and support of NavIC.

[R2-2107137](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107137.docx) Summary of Introduction of B3I signal in BDS system CATT, CAICT discussion Rel-17 NR\_pos\_enh-Core

[R2-2107138](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107138.docx) Introduction of B2a and B3I signal in BDS system in A-GNSS CATT, CAICT draftCR Rel-17 36.305 16.3.0 B NR\_pos\_enh-Core

[R2-2107139](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107139.DOCX) Introduction of B2a and B3I signal in BDS system in A-GNSS CATT, CAICT draftCR Rel-17 38.305 16.5.0 B NR\_pos\_enh-Core

[R2-2107140](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107140.docx) Introduction of B2a signal in BDS system in A-GNSS CATT, CAICT draftCR Rel-17 37.355 16.5.0 B NR\_pos\_enh-Core

[R2-2107141](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107141.docx) Introduction of B3I signal in BDS system in A-GNSS CATT, CAICT draftCR Rel-17 37.355 16.5.0 B NR\_pos\_enh-Core

[R2-2107990](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107990%20-%20BDS%20ephemeris.docx) Text proposal on BDS ephemeris (B2I) Swift Navigation discussion

### 8.11.7 Other

Input on other WI objectives.

Positioning reference units

[R2-2107143](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107143.docx) Discussion on Positioning Reference Units (PRUs) for positioning enhancement CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2107357](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107357%20-%20Discussion%20on%20PRU%20of%20positioning.docx) Discussion on PRU of positioning Spreadtrum Communications discussion Rel-17

[R2-2107647](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107647%20Discussion%20on%20support%20for%20positioning%20reference%20unit.docx) Discussion on support for Positioning Reference Unit vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2107689](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107689%20(R17%20NR%20POS%20WI%20AI8117_PRU).doc) Discussion on supporting Positioning Reference Units InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2107831](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107831-%20Discussion%20on%20Positioning%20Reference%20Units%20(PRUs).doc) Discussion on the Positioning Reference Units (PRUs) OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2108131](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108131_PRUs_LenMM.docx) Support of Positioning Reference Units Lenovo, Motorola Mobility discussion Rel-17

[R2-2108386](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108386_(Positioning%20Reference%20Units).docx) Signalling and Procedures for supporting Positioning Reference Units Qualcomm Incorporated discussion

[R2-2108398](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108398%20PRU.docx) On the Positioning Reference Units aspects Ericsson discussion

Other

[R2-2107501](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2107501%20Discussion%20on%20positioning%20enhancement.docx) Discussion on positioning enhancement Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2108399](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202108%20-%20RAN2_115-e,%20Online\Extracts\R2-2108399%20High%20accuracy.docx) On high accuracy aspects Ericsson discussion