3GPP TSG-RAN WG2 Meeting #114-e R2-21xxxxx

Online, 19-27 May 2021

Source: Session Chair (MediaTek)

Title: Report from session on positioning and sidelink relay

# 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.

* [AT114-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: Thursday 2021-05-27 1000 UTC

* [AT114-e][604][Relay] Summary on agenda item 8.7.4.1 on L2 relay control plane (vivo)

Scope: Discuss the proposals in R2-2106463 and progress toward consensus where possible.

Intended outcome: Report to comeback session, in R2-2106577

Deadline: 2021-05-25 1000 UTC

* [AT114-e][605][Relay] Summary on AI 8.7.4.2 on L2 relay service continuity (Samsung)

Scope: Discuss the proposals from R2-2106481 and progress toward consensus where possible.

Intended outcome: Report to comeback session, in R2-2106578

Deadline: 2021-05-25 1000 UTC

* [AT114-e][610][POS] Agenda item 4.4 on LTE positioning Rel-15 and earlier (Lenovo)

Scope: Handle the contributions to agenda item 4.4:

* Confirm agreement on the AIP CRs: R2-2104793/R2-2104794
* Discuss and conclude on new proposals: R2-2104800/R2-2104801, R2-2105209/R2-2105210/R2-2105211, R2-2106410
* Conclude handling of the 37.355 CRs related to R2-2106410: R2-2106411/R2-2106412 (note R2-2106411 should be category F, with a note linking it to R2-2106410)

Intended outcome: Agreed CRs, report in R2-2106579

Deadline: Tuesday 2021-05-25 1000 UTC

* [AT114-e][611][POS] Agenda item 5.5 on NR Rel-15 positioning (Huawei)

Scope: Discuss and conclude on the CRs in R2-2105052/R2-2105053.

Intended outcome: Agreed CRs, report in R2-2106580

Deadline: 2021-05-25 1000 UTC

* [AT114-e][612][POS] Agenda item 7.5 on LTE Rel-16 positioning (Huawei)

Scope: Confirm agreement on the AIP CR in R2-2105047.

Intended outcome: Agreed CR

Deadline: 2021-05-25 1000 UTC

* [AT114-e][613][POS] Rel-17 A-GNSS enhancements (CATT/Ericsson)

Scope: Discuss the draft CR in R2-2105143 and impact analysis in R2-2105972 and collect company inputs.

Intended outcome: Report in R2-2106581

Deadline: 2021-05-27 0000 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.

* [AT114-e][610][POS] Agenda item 4.4 on LTE positioning Rel-15 and earlier (Lenovo)

Scope: Handle the contributions to agenda item 4.4:

* Confirm agreement on the AIP CRs: R2-2104793/R2-2104794
* Discuss and conclude on new proposals: R2-2104800/R2-2104801, R2-2105209/R2-2105210/R2-2105211, R2-2106410
* Conclude handling of the 37.355 CRs related to R2-2106410: R2-2106411/R2-2106412 (note R2-2106411 should be category F, with a note linking it to R2-2106410)

Intended outcome: Agreed CRs, report in R2-2106579

Deadline: Tuesday 2021-05-25 1000 UTC

R2-2106579 (Report of [AT114-e][610]) Lenovo discussion Rel-15

In-principle-agreed CRs

[R2-2104793](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\36331_CR4611r2_(Rel-15)_R2-2104793.docx) Corrections on the acquisition of a posSI message CATT CR Rel-15 36.331 15.13.0 4611 2 F LCS\_LTE\_acc\_enh-Core R2-2104518

[R2-2104794](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\36331_CR4612r2_(Rel-16)_R2-2104794.docx) Corrections on the acquisition of a posSI message CATT CR Rel-16 36.331 16.4.0 4612 2 A LCS\_LTE\_acc\_enh-Core R2-2104519

Other

[R2-2104800](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\36331_CR4652_(Rel-15)_R2-2104800.docx) Corrections on the acquisition of a posSI message by BL UE or UE in CE CATT CR Rel-15 36.331 15.13.0 4652 - F LCS\_LTE\_acc\_enh-Core

[R2-2104801](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\36331_CR4653_(Rel-16)_R2-2104801.docx) Corrections on the acquisition of a posSI message by BL UE or UE in CE CATT CR Rel-16 36.331 16.4.0 4653 - A LCS\_LTE\_acc\_enh-Core

[R2-2105209](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\36331_CR4656_(Rel-15)_R2-2105209_PosSI_corrections.docx) Corrections to Positioning SI message scheduling for eMTC and NB-IoT Lenovo, Motorola Mobility CR Rel-15 36.331 15.13.0 4656 - F LCS\_LTE\_acc\_enh-Core

[R2-2105210](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\36331_CR4657_(Rel-16)_R2-2105210_PosSI_corrections.docx) Corrections to Positioning SI message scheduling for eMTC and NB-IoT Lenovo, Motorola Mobility CR Rel-16 36.331 16.4.0 4657 - A LCS\_LTE\_acc\_enh-Core

[R2-2105211](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105211_PosSI_scheduling_for_eMTC.doc) Positioning SI message scheduling for eMTC Lenovo, Motorola Mobility discussion Rel-15 LCS\_LTE\_acc\_enh-Core

[R2-2106410](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106410.docx) Clarification on endTransaction field Samsung CR Rel-14 36.355 14.7.0 0257 - F TEI14

Withdrawn/Not available

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

# 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.

* [AT114-e][611][POS] Agenda item 5.5 on NR Rel-15 positioning (Huawei)

Scope: Discuss and conclude on the CRs in R2-2105052/R2-2105053.

Intended outcome: Agreed CRs, report in R2-2106580

Deadline: 2021-05-25 1000 UTC

R2-2106580 (Report of [AT114-e][611]) Huawei discussion Rel-15

CRs

[R2-2105052](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105052%20Correction%20to%20E-CID-R15.doc) Correction to E-CID-R15 Huawei, HiSilicon CR Rel-15 38.305 15.8.0 0063 1 F NR\_newRAT-Core R2-2101816

[R2-2105053](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105053%20Correction%20to%20E-CID-R16.doc) Correction to E-CID-R16 Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0064 1 F NR\_pos-Core R2-2101817

Shadow CR of Rel-14 proposal

[R2-2106411](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106411.docx) Clarification on endTransaction field Samsung CR Rel-15 37.355 15.1.0 0309 - A TEI14

Withdrawn/Not available

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

# 6 Rel-16 NR Work Items

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

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

## 6.3 NR Positioning Support

(NR\_pos-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: RP-200218).

(NR TEI16 Positioning)

Documents in this agenda item will be handled in a break out session

Tdoc Limitation: 7 tdocs, See also tdoc limitation for Agenda Item 6

### 6.3.1 General and Stage 2 corrections

Including incoming LSs, Including impact to 36.305 and 38.305. Stage 2 corrections shall be discussed with the specification rapporteur (Sven Fischer sfischer@qti.qualcomm.com) before submission. Stage 2 CRs not discussed with the specification rapporteur will not be treated.

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

In-principle-agreed CRs

[R2-2105044](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105044%20Correction%20to%205G%20support%20for%20NB-IOT%20positioning.doc) Correction to 5G support for NB-IOT positioning Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0069 3 F TEI16 R2-2104407

[R2-2105048](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105048%20Correction%20to%20NR%20stage2%20spec%20for%20MO-LR.DOC) Correction to NR stage2 spec for MO-LR Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0072 2 F NR\_pos-Core R2-2104527

Other

[R2-2105055](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105055%20Correction%20to%20NRPPa%20PDU%20transfer%20for%20uplink%20positioning.doc) Correction to NRPPa PDU transfer for uplink positioning Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0073 - F NR\_pos-Core

[R2-2105967](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105967%20CR%20Stage2.docx) Addition of missing parameters for the SRS spatial information Ericsson CR Rel-16 38.305 16.4.0 0074 - F NR\_pos-Core

### 6.3.2 RRC corrections

Including impact to 36.331, 38.331, and 38.306.

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

In-principle-agreed CRs

[R2-2104795](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\38331_CR2490r2_(Rel-16)_R2-2104795.docx) Corrections on the description of SRS-Config CATT CR Rel-16 38.331 16.4.1 2490 2 F NR\_pos-Core R2-2104408

[R2-2105975](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105975%20offset%20CR.docx) Correction for the positioning SI offset and clarification on mapping of posSIB to SI Ericsson, Apple CR Rel-16 38.331 16.4.1 2574 1 F NR\_pos-Core R2-2104410

### 6.3.3 LPP corrections

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

In-principle-agreed CRs

[R2-2104796](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\37355_CR0294r2_(Rel-16)_R2-2104796.docx) Miscellaneous corrections on the field description CATT, Ericsson, ZTE CR Rel-16 37.355 16.4.0 0294 2 F NR\_pos-Core R2-2104520

[R2-2105045](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105045%20Correction%20to%20need%20code%20for%20DL%20LPP%20message-R15.doc) Correction to need code for DL LPP message-R15 Huawei, HiSilicon, Lenovo CR Rel-15 37.355 15.1.0 0298 2 F NR\_newRAT-Core, LCS\_LTE\_acc\_enh-Core R2-2104524

[R2-2105046](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105046%20Correction%20to%20need%20code%20for%20DL%20LPP%20message-R16.doc) Correction to need code for DL LPP message-R16 Huawei, HiSilicon, Lenovo CR Rel-16 37.355 16.4.0 0292 3 F NR\_pos-Core, NR\_newRAT-Core, LCS\_LTE\_acc\_enh-Core R2-2104525

[R2-2105049](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105049%20Correction%20to%20PRS%20configuration.doc) Correction to PRS configuration Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0300 2 F NR\_pos-Core R2-2104565

[R2-2105050](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105050%20Correction%20to%20the%20uplink%20LPP%20message.doc) Correction to the uplink LPP message Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0301 2 F NR\_pos-Core R2-2104566

[R2-2105051](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105051%20Correction%20to%20DL-PRS%20capability.doc) Correction to DL-PRS capability Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0302 2 F NR\_pos-Core R2-2104567

[R2-2105976](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105976%20layer%20Interaction.docx) LPP Layer interaction with lower layers for Positioning Frequency layer and Measurement Gap Ericsson CR Rel-16 37.355 16.4.0 0288 4 F NR\_pos-Core R2-2104575

Summary document

[R2-2106465](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106465%20LPP.docx) Summary for LPP Corrections for Positioning Ericsson discussion Rel-16 NR\_pos-Core

The following documents will not be individually treated

[R2-2104842](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104842%20Draft%20CR%20on%20timestamp%20reference%20in%20NR%20positioning%20measurement%20report.docx) 37.355 Draft CR on timestamp reference in NR positioning measurement report vivo draftCR Rel-16 37.355 16.4.0 NR\_pos-Core

[R2-2105054](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105054%20Correction%20to%20PRS-only%20TP%20v01.doc) Correction to PRS-only TP Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0305 - F NR\_pos-Core

[R2-2105056](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105056%20Correction%20to%20NR-ARFCN%20of%20the%20TRP.doc) Correction to NR-ARFCN of the TRP Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0306 - F NR\_pos-Core

[R2-2105962](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105962%20PFL.docx) Clarification on UE Signaling and measurements of DL-PRS for multiple Positioning Frequency Layers Ericsson CR Rel-16 37.355 16.4.0 0307 - F NR\_pos-Core

[R2-2105963](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105963%20ExpectedRSTD.docx) Correction of Expected RSTD to reflect Optional Presence for Broadcast Ericsson, Fraunhofer IIS, Fraunhofer HHI CR Rel-16 37.355 16.4.0 0308 - F NR\_pos-Core

Shadow CR of Rel-14 proposal

[R2-2106412](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106412.docx) Clarification on endTransaction field Samsung CR Rel-16 37.355 16.4.0 0310 - A TEI14

Withdrawn/Not available

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

### 6.3.4 MAC corrections

[R2-2104797](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\38321_CR1072r3_(Rel-16)_R2-2104797.docx) Corrections on SP Positioning SRS Activation and Deactivation MAC CE CATT CR Rel-16 38.321 16.4.0 1072 3 F NR\_pos-Core R2-2104412

[R2-2104798](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\38306_CR0572r1_(Rel-16)_R2-2104798.docx) Corrections on the UE capability of indication on supporting the extension of Positioning SRSresourceID CATT CR Rel-16 38.306 16.4.0 0572 1 F NR\_pos-Core R2-2104417

[R2-2104799](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\38331_CR2580r1_(Rel-16)_R2-2104799.docx) Corrections on the UE capability of indication on supporting the extension of Positioning SRSresourceID CATT CR Rel-16 38.331 16.4.1 2580 1 F NR\_pos-Core R2-2104418

[R2-2105966](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105966%20view%20on%20MAC%20CE.docx) "View on Correction for SP Positioning SRS Activation and Deactivation MAC CE" Ericsson discussion Rel-16 38.321

# 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.

* [AT114-e][612][POS] Agenda item 7.5 on LTE Rel-16 positioning (Huawei)

Scope: Confirm agreement on the AIP CR in R2-2105047.

Intended outcome: Agreed CR

Deadline: 2021-05-25 1000 UTC

In-principle-agreed CRs

[R2-2105047](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105047%20Correction%20to%20LTE%20stage2%20spec%20for%20MO-LR.DOC) Correction to LTE stage2 spec for MO-LR Huawei, HiSilicon CR Rel-16 36.305 16.2.0 0104 2 F TEI16, LCS\_LTE R2-2104526

# 8 Rel-17 NR Work Items

## 8.7 NR sidelink relay

(NR\_SL\_Relay-Core; leading WG: RAN2; REL-17; WID: RP-210904)

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

Focus for this meeting: Conclude stage 2 issues for the common topics on relay discovery and re/selection. L2 relay specific topics will be treated at lower priority.

### 8.7.1 Organizational

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

[R2-2104837](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104837%20-%20Work%20planning%20for%20R17%20SL%20relay.docx) Work planning for R17 SL relay OPPO, CMCC Work Plan Rel-17 NR\_SL\_relay-Core

[R2-2104945](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104945%20Running%20CR%20on%20Introduction%20of%20Rel-17%20Sidelink%20Relay.docx) Running CR on Introduction of Rel-17 Sidelink Relay MediaTek Inc. discussion Rel-17

### 8.7.2 Relay discovery

Re-using LTE discovery as baseline.

Summary document

[R2-2106457](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106457%20Summary%20of%208.7.2.DOCX) Summary of 8.7.2 OPPO discussion Rel-17 NR\_SL\_relay-Core

The following documents will not be individually treated

[R2-2104736](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104736%20-%20Remaining%20issues%20on%20relay%20discovery.doc) Remaining issues on relay discovery Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

[R2-2104746](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104746_Leftover%20issue%20on%20sidelink%20discovery.docx) Leftover Issues on Sidelink Discovery CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104869](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104869%20(R17%20SL%20Relay%20SI%20AI872%20Discovery).doc) Discovery Procedure for sidelink relay InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104892](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104892%20Discussion%20on%20remaining%20issues%20of%20NR%20sidelink%20relay%20discovery.docx) Discussion on remaining issues of NR sidelink relay discovery OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104958](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104958_Remaining%20issues%20on%20Relay%20Discovery%20Procedure.docx) Remaining issues on Relay discovery procedure vivo discussion Rel-17

[R2-2104976](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104976%20Discussion%20on%20Relay%20discovery%20in%20Sidelink%20Relay-final.doc) Discussion on Relay discovery in Sidelink Relay ZTE, Sanechips discussion Rel-17

[R2-2105022](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105022.docx) Open aspects on relay discovery Intel Corporation discussion Rel-17 NR\_SL\_relay

[R2-2105342](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105342%20Remaining%20issues%20for%20SL%20relay%20discovery.doc) Remaining issues for SL relay discovery Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2105390](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105390_disc_pool.doc) Discovery resources for sidelink relaying Kyocera discussion

[R2-2105491](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105491%20-%20Left%20issues%20for%20SL%20discovery.docx) Left issues for SL discovery Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2105535](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105535%20Discussion%20on%20relay%20discovery.doc) Discussion on Ralay discovery Spreadtrum Communications discussion Rel-17 NR\_SL\_relay-Core

[R2-2105740](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105740%20Remaining%20issues%20on%20discovery%20for%20sidelink%20relay%20v2.docx) Remaining issues on discovery for sidelink relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2105742](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105742.docx) Use of Pre-configuration and collocated neighbour cell carrier Beijing Xiaomi Mobile Software discussion

[R2-2105807](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105807%20Relay%20Discovery%20for%20L2%20and%20L3%20relay%20v1.0.doc) Relay Discovery for L2 and L3 relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2106266](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Docs\R2-2106266.zip) Left issues for relay discovery message transmission LG Electronics Inc. discussion Rel-17

[R2-2106435](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106435%20Consideration%20on%20remaining%20issues%20of%20NR%20sidelink%20relay%20discovery.docx) Consideration on remaining issues of NR sidelink relay discovery China Telecommunications discussion

[R2-2106437](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106437%20Remaining%20issues%20on%20Relay%20Discovery.docx) Remaining issues on Relay Discovery MediaTek Inc. discussion Rel-17 NR\_SL\_relay-Core

### 8.7.3 Relay re selection

Re-using LTE re/selection as baseline. Including outcome of [Post113bis-e][602][Relay] Definition of relay load criterion (Ericsson).

Email discussion summary

[R2-2105496](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105496%20-%20%5bPost113bis-e%5d%5b602%5d%5bRelay%5d%20Definition%20of%20relay%20load%20criterion%20(Ericsson).docx) [Post113bis-e][602][Relay] Definition of relay load criterion (Ericsson] Ericsson report Rel-17 NR\_SL\_relay-Core

Summary document

[R2-2106470](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106470%20Summary%20-%20AI%208.7.3.docx) [Pre114-e][603][Relay] Summary on agenda item 8.7.3 on relay (re)selection (CATT) CATT discussion Rel-17 NR\_SL\_relay-Core

The following documents will not be individually treated

[R2-2104737](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104737%20-%20Remaining%20issues%20on%20relay%20(re)selection.doc) Remaining issues on relay (re)selection Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

* Revised in R2-2104745

[R2-2104745](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104745%20-%20Remaining%20issues%20on%20relay%20(re)selection.doc) Remaining issues on relay (re)selection Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core Late

[R2-2104747](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104747_Remain%20Issues%20on%20Relay%20(Re)selection.docx) Remain Issues on Relay (Re)selection CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104870](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104870%20(R17%20SL%20Relay%20SI%20AI873%20Relay%20selection).doc) Relay selection and reselection InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104889](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104889_SL%20Relay%20Reselection_Intel.docx) Open aspects of Relay (re)selection Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2104893](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104893%20Discussion%20on%20remaining%20issues%20of%20relay%20(re)selection.docx) Discussion on remaining issues of NR sidelink relay (re)selection OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104959](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104959_Remaining%20issues%20on%20Relay%20(re)selection.docx) Remaining issues on Relay (re)selection vivo discussion Rel-17

[R2-2104971](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104971_Remaining_Open_Issues_Relay_Reselection.docx) Remaining Open Issues on Relay (re-)selection Fraunhofer HHI, Fraunhofer IIS discussion Rel-17

[R2-2104977](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104977%20Discussion%20on%20Relay%20selection%20in%20Sidelink%20Relay-final.doc) Discussion on Relay selection in Sidelink Relay ZTE, Sanechips discussion Rel-17

[R2-2105127](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105127%20Remaing%20issue%20on%20relay%20reselection.doc) Discussion on remaining issues of relay (re)selection and discovery Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105238](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105238%20RelaySelectionIssues.docx) Discussion on some relay (re)selection issues Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2105492](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105492%20-%20Aspects%20for%20SL%20relay%20selection%20and%20reselection.docx) Aspects for SL relay selection and reselection Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2105515](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105515%20Discussion%20on%20sidelink%20relay%20reselection.doc) Discussion on sidelink relay reselection SHARP Corporation discussion

[R2-2105536](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105536%20Discussion%20on%20relay%20selection%20and%20reselection.doc) Discussion on Ralay selection and reselection Spreadtrum Communications discussion Rel-17 NR\_SL\_relay-Core

[R2-2105695](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105695.doc) Relay (re)selection Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2105750](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105750.docx) Remote UE use of Relay UE Load Indication Beijing Xiaomi Mobile Software discussion

[R2-2105790](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105790%20Remaining%20PDB%20for%20SL%20relay.docx) Remaining PDB in UE-to-NW and UE-to-UE Relay Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2105808](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105808%20Relay%20(re)selection%20for%20L2%20and%20L3%20relay_v1.0.doc) Relay (re)selection for L2 and L3 relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2106011](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106011.doc) View on definition of relay load criterion Continental Automotive GmbH discussion

[R2-2106160](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106160%20Remaining%20issues%20on%20relay%20selection%20and%20reselection.docx) Remaining issues on relay selection and reselection Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2106203](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106203%20Use%20of%20relay%20load%20as%20a%20Relay%20(re)selection%20criterion.docx) Use of relay load as a Relay (re)selection criterion MediaTek Inc. discussion Rel-17

[R2-2106251](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106251%20Remaining%20issues%20on%20AS%20criteria%20for%20relay%20selection.docx) Remaining issues on AS criteria for relay selection CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2106268](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Docs\R2-2106268.zip) AS layer criteria for relay selection and reselection LG Electronics Inc. discussion Rel-17

[R2-2106271](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Docs\R2-2106271.zip) left L2/L3 common issues for relay selection and reselection LG Electronics Inc. discussion Rel-17

[R2-2106344](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106344%20Other%20remaining%20issues%20on%20(re)selection.docx) Other remaining issues on (re)selection MediaTek Inc. discussion Rel-17

### 8.7.4 L2 relay specific topics

No documents should be submitted to 8.7.4. Please submit to 8.7.4.x.

No suitable agenda item (topic will not be treated this meeting)

[R2-2104742](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104742%20-%20Further%20discussion%20adaptation%20layer%20of%20L2%20U2N%20relay.doc) Further discussion adaptation layer of L2 U2N relay Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.4.1 Control plane procedures

Including connection management, SI delivery, paging, access control for remote UE.

Summary document

[R2-2106463](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106463_%20Summary%20on%20agenda%20item%208.7.4.1%20on%20L2%20relay%20control%20plane%20(vivo).docx) Summary on agenda item 8.7.4.1 on L2 relay control plane vivo discussion Rel-17

* [AT114-e][604][Relay] Summary on agenda item 8.7.4.1 on L2 relay control plane (vivo)

Scope: Discuss the proposals in R2-2106463 and progress toward consensus where possible.

Intended outcome: Report to comeback session, in R2-2106577

Deadline: 2021-05-25 1000 UTC

R2-2106577 (Summary of [AT114-e][604]) vivo discussion Rel-17

The following documents will not be individually treated

[R2-2104738](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104738%20-%20Further%20discussion%20on%20control%20plane%20procedures%20of%20L2%20U2N%20relay.doc) Further discussion on control plane procedures of L2 U2N relay Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

[R2-2104748](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104748_Control%20Plane%20Procedures%20of%20L2%20Relay.docx) Control Plane Procedures of L2 Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104838](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104838%20-%20Left%20issues%20on%20RRC%20procedure%20for%20L2%20U2N%20Relay_v2.docx) Left issues on RRC procedure for L2 U2N Relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104871](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104871%20(R17%20SL%20Relay%20SI_AI8741%20CP%20Procedures).doc) Control Plane Procedures for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104888](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104888_SLRelay_ControlPlane_Intel.docx) Control plane procedures for L2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2104946](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104946%20Stage%202%20level%20procedure%20for%20Connection%20Establishment%20v1.docx) Stage 2 level procedure for Connection Establishment MediaTek Inc. discussion Rel-17

[R2-2104960](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104960_Further%20Discussion%20on%20L2%20Control%20Plane%20Procedures.docx) Further Discussion on L2 Control Plane Procedures vivo discussion Rel-17

[R2-2104978](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104978%20Consideration%20on%20the%20control%20plane%20procedure%20of%20SL%20relay-final.doc) Consideration on the control plane procedure of SL relay ZTE, Sanechips discussion Rel-17

[R2-2105030](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105030%20control%20plane%20open%20issues.docx) Open Issues in L2 Relay Control Plane Procedures Futurewei discussion Rel-17 NR\_SL\_relay-Core

[R2-2105074](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105074%20Monitoring%20Paging%20by%20a%20U2N%20Relay.doc) Monitoring Paging by a U2N Relay Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2105076](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105076%20SI%20acquisition,%20CN%20Registration%20and%20RNAU.doc) SI acquisition, CN Registration and RNAU Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2105128](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105128%20Discussion%20on%20Unified%20Access%20Control%20in%20Relay%20UE.doc) Discussion on Unified Access Control in Relay UE Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105129](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105129%20Discussion%20on%20RNA%20Update%20procedures%20in%20L2%20UE-to-NW%20Relay.doc) Discussion on RNA Update procedures in L2 UE-to-NW Relay Apple discussion Rel-17 NR\_SL\_relay-Core

* Revised in R2-2106450

[R2-2106450](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106450%20Discussion%20on%20RNA%20Update%20procedures%20in%20L2%20UE-to-NW%20Relay_v2.doc) Discussion on RNA Update procedures in L2 UE-to-NW Relay Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105130](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105130%20QOS%20for%20Layer%202%20UE-to-NW%20relay.doc) Discussion on QoS mechanism for Layer 2 UE-to-NW relay Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105343](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105343%20On-demand%20SI%20request%20for%20remote%20UE.doc) On-demand SI request for Remote UE Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2105380](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105380%20Discussion%20on%20on-demand%20SI%20acquisition%20procedure%20for%20U2N%20Relay.docx) Discussion on on-demand SI acquisition procedure for U2N Relay ASUSTeK discussion Rel-17 NR\_SL\_relay-Core

[R2-2105391](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105391_L2_relaying.doc) RRC state transitions and RLF handling in L2 relaying Kyocera discussion

[R2-2105486](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105486%20Connection%20control%20on%20L2%20relay.doc) Connection control on L2 relay Xiaomi communications discussion

[R2-2105537](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105537%20Discussion%20on%20control%20plane%20procedures%20for%20L2%20U2N%20relay.doc) Discussion on control plane procedures for L2 U2N relay Spreadtrum Communications discussion Rel-17 NR\_SL\_relay-Core

[R2-2105678](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105678%20Various%20configuration%20and%20QoS%20management%20aspects%20of%20L2%20relaying.doc) Various configuration and QoS management aspects of L2 relaying Samsung Electronics GmbH discussion

[R2-2105696](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105696.doc) L2 relay control plane procedures Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2105739](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105739%20SIB%20Handling%20in%20Sidelink%20UE-to-Nwk%20Relay.docx) SIB Handling in Sidelink UE-to-Nwk Relay Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_SL\_relay R2-2103482

[R2-2105773](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105773-%20Discussion%20on%20control%20plane%20procedures%20for%20L2%20sidelink%20relay.docx) Discussion on control plane procedures for L2 sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2105960](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105960-Paging%20and%20SI%20deliveries.doc) Paging and SI deliveries for L2 relay ETRI discussion Rel-17 NR\_SL\_relay-Core

[R2-2106054](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106054%20SL%20L2%20Relay%20adaptation%20layer.docx) Discussion on Uu adaptation layer in L2 UE-to-NW relay Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay

[R2-2106161](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106161%20Discussion%20on%20the%20CP%20procedures%20for%20L2%20Relay.docx) Discussion on the CP procedures for L2 Relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2106252](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106252%20Discussion%20on%20control%20plane%20procedure.docx) Discussion on control plane procedure CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2106273](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Docs\R2-2106273.zip) L2 relay specific topics related to the control plane procedures LG Electronics Inc. discussion Rel-17

[R2-2106293](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106293%20Discussion%20on%20establishment%20cause%20of%20relay%20UE.doc) Discussion on establishment cause value of relay UE Xiaomi, Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility, Vivo, Apple, ZTE discussion

#### 8.7.4.2 Service continuity

Service continuity between Uu and relay paths, limited to intra-gNB cases. This AI will be treated on a time-available basis

Summary document

[R2-2106481](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106481%20-%20Summary%20on%208.7.4.2.doc) Summary on AI 8.7.4.2 on L2 relay service continuity Samsung discussion Rel-17 NR\_SL\_relay-Core

* [AT114-e][605][Relay] Summary on AI 8.7.4.2 on L2 relay service continuity (Samsung)

Scope: Discuss the proposals from R2-2106481 and progress toward consensus where possible.

Intended outcome: Report to comeback session, in R2-2106578

Deadline: 2021-05-25 1000 UTC

R2-2106578 (Summary of [AT114-e][605]) Samsung discussion Rel-17 NR\_SL\_relay-Core

The following documents will not be individually treated

[R2-2104739](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104739%20-%20Service%20continuity%20of%20L2%20U2N%20relay.doc) Service continuity of L2 U2N relay Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

[R2-2104749](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104749_Service%20Continuity%20for%20L2%20U2N%20Relay.docx) Service Continuity for L2 U2N Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104872](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104872%20(R17%20SL%20Relay%20SI_AI8742%20Service_Continuity).doc) Service Continuity for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104891](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104891_Further%20Details%20on%20Service%20Continuity%20for%20L2%20U2N%20Relay.docx) Service Continuity support for L2 U2N Relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2104894](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104894%20Discussion%20on%20service%20continuity%20in%20NR%20sidelink%20relay.docx) Discussion on service continuity in NR sidelink relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104961](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104961_Service%20continuity%20and%20Adaptation.docx) Service continuity and Adaptation Layer for L2 SL Relay vivo discussion Rel-17

[R2-2104979](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104979%20Discussion%20on%20the%20service%20continuity%20of%20SL%20relay.doc) Discussion on the service continuity of SL relay ZTE, Sanechips discussion Rel-17

[R2-2105029](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105029%20mobility%20open%20issues.docx) Open Issues in Switches between Direct and Indirect Paths Futurewei discussion Rel-17 NR\_SL\_relay-Core

[R2-2105344](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105344%20Service%20continuity%20support%20for%20SL%20remote%20UE.doc) Service continuity support for SL remote UE Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2105741](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105741%20Discussion%20on%20service%20continuity%20and%20adaptation%20layer%20for%20L2%20UE%20to%20NW%20Relay.docx) Discussion on service continuity and adaptation layer for L2 UE to NW Relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2105774](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105774-%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

[R2-2106253](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106253%20Service%20continuity%20for%20L2%20relay.docx) Service continuity for L2 relay CMCC discussion Rel-17 NR\_SL\_relay-Core

## 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.

Work planning

[R2-2104921](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104921%20Clarification%20on%20work%20scope%20of%20Rel-17%20positioning%20enhancement.docx) Clarification on work scope of Rel-17 positioning enhancement Intel Corporation discussion Rel-17 NR\_pos\_enh

Incoming LS

[R2-2104713](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104713_R1-2104089.docx) LS on DL-AoD angle calculation enhancement (R1-2104089; contact: Ericsson) RAN1 LS in Rel-17 NR\_pos\_enh-Core To:RAN2, RAN3

Withdrawn/Not available

R2-2106092 Clarification on work scope of Rel-17 positioning enhancement Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

R2-2106096 Support of angle calculation enhancement for DL-AoD Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

### 8.11.2 Latency enhancements

Enhancements of signalling, and procedures for improving positioning latency of the Rel-16 NR positioning methods, for DL and DL+UL positioning methods.

Summary document

[R2-2106449](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106449%20summary%20of%20AI%208%2011%202%20latency%20reduction.docx) Summary of AI 8.11.2 Latency enhancements CATT discussion Rel-17 NR\_pos\_enh-Core

The following documents will not be individually treated

[R2-2104844](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104844%20Enhancement%20for%20positioning%20latency.docx) Enhancement for positioning latency vivo discussion NR\_pos\_enh-Core

[R2-2104845](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104845%20Discuss%20Scheduling%20Location%20in%20Advance%20to%20reduce%20Latency.docx) Discuss Scheduling Location in Advance to reduce Latency vivo discussion NR\_pos\_enh-Core

[R2-2104922](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104922.docx) Scheduled location time based latency reduction Intel Corporation discussion Rel-17 NR\_pos\_enh R2-2102849

R2-2105037 Discussion on positioning latency Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105142](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105142%20Discussion%20on%20scheduled%20location%20time%20for%20latency%20reduction.docx) Discussion on scheduled location time for latency reduction CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2105219](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105219%20Discussion%20on%20positioning%20latency.docx) Discussion on positioning latency Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105302](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105302%20(R17%20NR%20POS%20WI_AI8112_Latency).doc) Discussion on Enhancements for Latency Reduction InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105523](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105523%20Further%20consideration%20of%20positioning%20latency%20enhancments.doc) Further consideration of positioning latency enhancments OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2105557](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105557%20Discussion%20on%20UE%20capability%20regarding%20positioning%20latency.docx) Discussion on UE capability regarding positioning latency BEIJING SAMSUNG TELECOM R&D discussion Rel-17

[R2-2105560](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105560%20Positioning%20enhancements%20on%20latency%20reduction.doc) Positioning enhancements on latency reduction Xiaomi discussion

[R2-2105600](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105600_PosLatencyReduction_LenMM.docx) Positioning Latency Reduction Enhancements Lenovo, Motorola Mobility discussion Rel-17

[R2-2105968](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105968%20latency%20.docx) "For latency reduction Need of QoS info in gNB and positioning capability storage" Ericsson discussion Rel-17

[R2-2105973](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105973%20LS%20.docx) draft LS to different groups Ericsson discussion Rel-17

[R2-2106082](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106082_(Scheduling%20in%20Advance).docx) Scheduling Location in Advance to Reduce Latency Qualcomm Incorporated discussion

R2-2106093 Scheduled location time based latency reduction Intel Corporation discussion Rel-17 NR\_pos\_enh R2-2102849 Withdrawn

[R2-2106261](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106261%20Discussion%20on%20latency%20reduction%20for%20positioning.docx) Discussion on latency reduction for positioning CMCC discussion Rel-17 NR\_pos\_enh-Core

[R2-2106367](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106367%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

[R2-2106368](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106368%20(8.11.2)%20Discussion%20on%20the%20scheduled%20location%20time.docx) Discussion on the scheduled location time Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106376](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106376%20(8.11.2)%20posSI%20request%20enhancement%20for%20latency%20reduction.docx) posSI request enhancement for latency reduction Samsung R&D Institute UK discussion

[R2-2106426](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106426.docx) Discussion on positioning latency reduction ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

### 8.11.3 RRC\_INACTIVE

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

Summary document

[R2-2106447](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106447%20Summary%20of%20AI%208.11.3%20for%20INACTIVE%20POS.docx) Summary of AI 8.11.3 for INACTIVE POS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

* Revised in R2-2106576

R2-2106576 Summary of AI 8.11.3 for INACTIVE POS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

The following documents will not be individually treated

[R2-2104802](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104802%20Positioning%20for%20UEs%20in%20RRC_INACTIVE%20state.docx) Positioning for UEs in RRC\_INACTIVE state CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2104846](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104846%20Discussion%20on%20open%20issues%20of%20positioning%20support%20in%20%20RRC_INACTIVE%20state.docx) Discussion on open issues of positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core Withdrawn

[R2-2104847](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104847%20Discussion%20on%20UL%20positioning%20support%20in%20%20RRC_INACTIVE%20state.docx) Discussion on UL positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core Withdrawn

[R2-2104923](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104923%20Support%20of%20Positioning%20in%20RRC_INACTIVE%20v05.docx) Support of Positioning in RRC\_INACTIVE Intel Corporation, Apple, OPPO, Xiaomi, InterDigital Inc., Spreadtrum, CATT, Huawei, HiSilicon, ZTE, vivo, Convida Wireless, Nokia discussion Rel-17 NR\_pos\_enh Revised

R2-2105034 Discussion on positioning in RRC INACTIVE state Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

R2-2105041 Draft LS to SA2 on INACTIVE positioning Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105216](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105216%20Discussion%20on%20positioning%20in%20RRC%20INACTIVE%20state.docx) Discussion on positioning in RRC INACTIVE state Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105222](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105222%20Draft%20LS%20to%20SA2%20on%20INACTIVE%20positioning.docx) Draft LS to SA2 on INACTIVE positioning Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105303](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105303%20(R17%20NR%20POS%20WI%20AI8113_INACTIVE_AD).doc) Discussion on Positioning in RRC INACTIVE state InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105304](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105304%20(R17%20NR%20POS%20WI%20AI8113_INACTIVE_SDT).doc) Discussion on Positioning Information reporting using SDT InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105309](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105309%20(R17%20NR%20POS%20WI%20AI8117_INACTIVE_Mobility).doc) Discussion on Positioning during Mobility in RRC INACTIVE InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105339](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105339-%20Supporting%20positioning%20in%20RRC_INACTIVE%20state.docx) Supporting positioning in RRC\_INACTIVE state OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105340](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105340%20-%20Discussion%20on%20UL%20Positioning%20methods%20in%20RRC_INACTIVE%20state.docx) Discussion on UL Positioning methods in RRC\_INACTIVE state OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105546](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105546-%20Discussion%20on%20positioning%20in%20RRC_INACTIVE%20state%7f.docx) Discussion on positioning in RRC\_INACTIVE state Spreadtrum Communications discussion Rel-17 NR\_pos\_enh-Core

[R2-2105561](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105561%20Discussion%20on%20positioning%20for%20UEs%20in%20RRC%20Inactive.doc) Discussion on positioning for UEs in RRC Inactive Xiaomi discussion

[R2-2105601](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105601_Inactive_Positioning_LenMM.docx) On Positioning in RRC\_INACTIVE state Lenovo, Motorola Mobility discussion Rel-17

[R2-2105703](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105703_Pos_Inactive_Final.docx) Considerations on positioning RRC Inactive Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2105710](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105710_RRC_INACTIVE_Fraunhofer.docx) Considerations on Assistance data for positioning in RRC\_INACTIVE mode. Fraunhofer IIS; Fraunhofer HHI discussion

[R2-2105971](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105971%20SDT.docx) On Maximizing benefits of SDT Ericsson discussion Rel-17

[R2-2106083](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106083_(positioning%20in%20inactive%20state).docx) Positioning of UEs in RRC Inactive State Qualcomm Incorporated discussion

R2-2106094 Support of Positioning in RRC\_INACTIVE Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

[R2-2106104](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106104%20Support%20of%20UL%20and%20RAT%20independent%20positioning%20%20in%20RRC_INACTIVE.docx) Support of UL and RAT independent positioning in RRC\_INACTIVE Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2106369](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106369%20(8.11.3)%20Support%20of%20positioning%20result%20reporting%20in%20Inactive%20state.docx) Support of positioning result reporting in Inactive state Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106408](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106408%20Discussion%20on%20UL%20positioning%20support%20in%20%20RRC_INACTIVE%20state.docx) Discussion on UL positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core

[R2-2106409](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106409%20Discussion%20on%20open%20issues%20of%20positioning%20support%20in%20%20RRC_INACTIVE%20state.docx) Discussion on open issues of positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core

[R2-2106429](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106429.docx) Discussion on DL INACTIVE positioning ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106430](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106430.docx) Discussion on MG for INACTIVE positioning ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106434](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106434%20Support%20of%20Positioning%20in%20RRC_INACTIVE%20v06.docx) Support of Positioning in RRC\_INACTIVE Intel Corporation, Apple, OPPO, Xiaomi, InterDigital Inc., Spreadtrum, CATT, Huawei, HiSilicon, ZTE, vivo, Convida Wireless, Nokia discussion Rel-17 NR\_pos\_enh R2-2104923 Late

### 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.

Summary document

R2-2106467 Summary on agenda item 8.11.4 on on-demand PRS Qualcomm Incorporated discussion

The following documents will not be individually treated

[R2-2104803](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104803%20Further%20discussion%20on%20on-demand%20PRS.docx) Further discussion on on-demand PRS CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2104848](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104848%20Discuss%20on%20demand%20PRS.docx) Discuss on-demand PRS vivo discussion NR\_pos\_enh-Core

[R2-2104924](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104924%20Support%20of%20on%20demand%20PRS.docx) Support of on-demand PRS request Intel Corporation discussion Rel-17 NR\_pos\_enh

R2-2105035 Discussion on on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

R2-2105040 Stage-2 TP for on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105134](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105134%20Discussion%20on%20demand%20PRS.doc) Discussion on UE-initiated on-demand PRS Apple discussion Rel-17 NR\_pos\_enh-Core

[R2-2105217](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105217%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105221](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105221%20Stage-2%20TP%20for%20on-demand%20PRS.docx) Stage-2 TP for on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105305](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105305%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

[R2-2105306](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105306%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

[R2-2105338](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105338-%20Discussion%20on%20on-demand%20DL-PRS.doc) Discussion on on-demand DL-PRS OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105547](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105547-%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS Spreadtrum Communications discussion Rel-17 NR\_pos\_enh-Core

[R2-2105562](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105562%20Positioning%20enhancement%20to%20on-demand%20DL%20PRS%20.doc) Positioning enhancement to on-demand DL PRS Xiaomi discussion

[R2-2105603](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105603_On-DemandPRS_LenMM.docx) On-Demand DL-PRS Support Lenovo, Motorola Mobility discussion Rel-17

[R2-2105704](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105704_Pos_PRS_Ondemand_Final.docx) Considerations on positioning PRS On-demand Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2105734](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105734_OnDemandPRS_Fraunhofer.docx) On-demand PRS Fraunhofer IIS, Fraunhofer HHI discussion Rel-17 R2-2103564

[R2-2105969](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105969%20On%20Demand%20PRS.docx) On demand PRS Ericsson discussion Rel-17

[R2-2106084](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106084_(On-demand%20PRS).docx) On-Demand DL-PRS Qualcomm Incorporated discussion

R2-2106095 Support of on-demand PRS request Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

[R2-2106354](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106354%20On-demand%20PRS%20_UE_feedback.docx) UE feedback for on-demand PRS Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2106355](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106355%20Preconfiguration%20of%20on-demand%20PRS.docx) Pre-configuration and initiation of on-demand PRS associated with QoS/radio conditions Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2106370](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106370%20(8.11.4)%20Support%20of%20on-demand%20DL%20PRS%20for%20positioning%20efficiency%20.docx) Support of on-demand DL PRS for positioning efficiency Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106379](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106379%20on-demand%20PRS.docx) On-demand DL PRS transmission and reception Convida Wireless discussion

[R2-2106424](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106424.docx) Discussion on restriction of on demand PRS ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106425](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106425.docx) Discussion on on demand PRS ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

### 8.11.5 GNSS positioning integrity

Signalling, and procedures to support GNSS positioning integrity determination.

Summary document

[R2-2106453](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106453%20Summary%20-%20AI%208.11.5.docx) [Pre114-e][609][POS] Summary on agenda item 8.11.5 on GNSS integrity (Nokia) Nokia discussion Rel-17 NR\_pos\_enh-Core

The following documents will not be individually treated

[R2-2104843](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104843%20Discussion%20on%20methodologies%20for%20network-assisted%20and%20UE-assisted%20integrity.docx) Discussion on methodologies for network-assisted and UE-assisted integrity vivo discussion NR\_pos\_enh-Core

R2-2105036 Discussion on network-assisted and UE-assisted integrity Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105218](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105218%20Discussion%20on%20network-assisted%20and%20UE-assisted%20integrity.docx) Discussion on network-assisted and UE-assisted integrity Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105308](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105308%20(R17%20NR%20POS%20WI%20AI8115_GNSS_Integrity).doc) Discussion on procedures and signalling for GNSS positioning integrity InterDigital, Inc. discussion Rel-17

[R2-2105524](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105524%20Discussion%20on%20supporting%20positioning%20integrity%20in%20RAN.doc) Discussion on supporting positioning integrity in RAN OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2105563](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105563%20Discussion%20on%20signalling%20and%20procedures%20for%20GNSS%20positioning%20integrity.doc) Discussion on signalling and procedures for GNSS positioning integrity Xiaomi discussion

[R2-2105735](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105735_UE_Integrity_Fraunhofer_Ericsson.docx) UE-aided detection of threat to GNSS systems and assistance data signaling Fraunhofer IIS; Fraunhofer HHI; Ericsson discussion

[R2-2105874](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105874%20Positioning%20Integrity%20Support%20in%20LPP.docx) Positioning Integrity Support in LPP Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_pos\_enh

* Revised in R2-2106445

[R2-2106445](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106445%20Positioning%20Integrity%20Support%20in%20LPP%20(Rev%20R2-2105874).docx) Positioning Integrity Support in LPP Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105970](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105970%20GNSS%20Integrity.docx) On GNSS Integrity Ericsson discussion Rel-17

[R2-2105985](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105985%20Guiding%20framework%20on%20integrity%20concepts%20for%20A-GNSS%20positioning.docx) Guiding framework on integrity concepts for A-GNSS positioning ESA discussion Rel-17 NR\_pos\_enh

[R2-2106085](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Docs\R2-2106085.zip) Considerations on GNSS positioning integrity support Qualcomm Incorporated discussion

[R2-2106105](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106105%20-%20Proposals%20on%20GNSS%20Integrity.docx) Proposals on GNSS integrity assistance information Swift Navigation discussion

[R2-2106371](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106371%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

[R2-2106427](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106427.docx) Discussion on positioning integrity transportation ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106428](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106428.docx) Discussion on positioning integrity data calculation and LS to RTCM ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

### 8.11.6 A-GNSS enhancements

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

To be discussed by email

[R2-2105143](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\37355_CRXXXX_(Rel-17)_R2-2105143.docx) Introduction of B2a signal in BDS system in A-GNSS CATT, CAICT draftCR Rel-17 37.355 16.4.0 B NR\_pos\_enh-Core

[R2-2105972](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105972%20NavIC%20.docx) Impacts of NavIC in NR RRC Ericsson discussion Rel-17

* [AT114-e][613][POS] Rel-17 A-GNSS enhancements (CATT/Ericsson)

Scope: Discuss the draft CR in R2-2105143 and impact analysis in R2-2105972 and collect company inputs.

Intended outcome: Report in R2-2106581

Deadline: 2021-05-27 0000 UTC

### 8.11.7 Other

Input on other WI objectives.

Related to LS on DL-AoD enhancement

[R2-2104804](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104804%20Discussion%20on%20LS%20on%20DL-AoD%20angle%20calculation%20enhancement.docx) Discussion on LS on DL-AoD angle calculation enhancement CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2104849](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104849%20Discussion%20on%20DL-AoD%20angle%20calculation%20enhancement.docx) Discussion on DL-AoD angle calculation enhancement vivo discussion NR\_pos\_enh-Core

[R2-2104925](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2104925%20%20DL-AOD.docx) Support of angle calculation enhancement for DL-AoD Intel Corporation discussion Rel-17 NR\_pos\_enh

Other

[R2-2105220](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105220%20Discussion%20on%20positioning%20enhancement%20v00.docx) Discussion on positioning enhancement Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105974](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2105974%20Accuracy.docx) On High Accuracy Aspects Ericsson discussion Rel-17

[R2-2106086](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202105%20-%20RAN2_114-e,%20Online\Extracts\R2-2106086_(Reference%20Devices).docx) Signalling and Procedures for supporting Reference Location Devices Qualcomm Incorporated discussion

Withdrawn/Not available

R2-2105038 Discussion on positioning enhancement Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn