3GPP TSG-RAN WG2 Meeting #122 R2-23xxxxx

Incheon, Korea, 22-26 May 2023

Source: Session Chair (MediaTek)

Title: Report from session on positioning and sidelink relay

# At-Meeting Email Discussions

This subsection is not an Agenda Item. It enumerates the email discussions allocated during the meeting. This subsection will be moved to an Annex in the final version of the session report.

* [AT122][400][POS][Relay] Organisational Nathan - Positioning/Relay (MediaTek)

Scope: Organisational discussions and announcements, as needed during the meeting week.

Intended outcome: Well-informed participants

Deadline: Friday 2023-05-26 1700 KST

* [AT122][401][POS] Sidelink positioning summary proposals (Xiaomi)

Scope: Discuss and gauge support on the proposals in R2-2306757, converge on easily agreeable parts, and identify discussion points for the online session on Wednesday 2023-05-24.

Intended outcome: Summary to online session in R2-2306671

Deadline: Tuesday 2023-05-23 2000 KST

* [AT122][402][Relay] Multi-path relay summary proposals (OPPO)

Scope: Discuss and gauge support on the proposals in R2-2306556, converge on easily agreeable parts, and identify discussion points for the online session on Tuesday 2023-05-23.

Intended outcome: Summary to online session in R2-2306672

Deadline: Tuesday 2023-05-23 1100 KST

* [AT122][403][POS] 1-symbol PRS CR check (ZTE)

Scope: Check the CRs in R2-2306079 / R2-2306080 / R2-2306081 / R2-2306082 / R2-2306083

Intended outcome: CRs agreeable in principle

Deadline: Wednesday 2023-05-24 2000 KST

* [AT122][404][POS] GNSS LOS/NLOS CR check (Vodafone)

Scope: Check the CRs in R2-2306535 / R2-2306536 / R2-2306537, taking into account the exposition in R2-2306534.

Intended outcome: CRs agreeable in principle

Deadline: Wednesday 2023-05-24 2000 KST

* [AT122][405][POS] Yaw and APC in Rel-18 (Swift)

Scope: Check the proposals in R2-2305265 and adapt the TPs into CRs if agreeable.

Intended outcome: Report to CB session in R2-2306673 and potentially CRs agreed in principle

Deadline: Wednesday 2023-05-24 2000 KST

* [AT122][406][POS] Positioning for remote UEs CR check (CATT)

Scope: Check the CRs in R2-2305852 / R2-2305854 / R2-2305857 / R2-2305859 in light of the exposition in R2-2305850 / R2-2305865, and evaluate the proposals in R2-2306019.

Intended outcome: Report to CB session in R2-2306674 and CRs agreeable in principle

Deadline: Wednesday 2023-05-24 2000 KST

* [AT122][407][POS] Rel-15/16 positioning CR check (Intel)

Scope: Check the CRs in R2-2306459 / R2-2306460 / R2-2306451 (in light of the exposition in R2-2306409), R2-2306027 / R2-2306028, and R2-2306084 / R2-2306085.

Intended outcome: Agreeable CRs

Deadline: Thursday 2023-05-25 1100 KST

# 4 EUTRA Rel-17 and earlier

Only essential corrections. No documents should be submitted to 4. Please submit to 4.x

## 4.4 Positioning corrections Rel-16 and earlier

(LTE\_NavIC-Core, LTE TEI16 Positioning), REL-15 and Earlier WIs related to positioning are in scope but not listed explicitly (long list).

This Agenda Item will be handled by email.

### 4.4.0 In-Principle-Agreed CRs

### 4.4.1 Corrections

# 5 NR Rel-15 and Rel-16

Essential corrections only.

Tdoc Limitation: 8 tdocs in total for all sub agenda items.

In case a correction need to be reflected in both NR TS and LTE TS, the corrections should be submitted under one single AI (so the NR and LTE correction can be treatee together), the sub-AIs below this

## 5.3 NR Positioning Support

(NR\_newRAT-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 19: WID: RP-191971)

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

(NR TEI16 Positioning)

This agenda item will be handled by email.

### 5.3.0 In-Principle-Agreed CRs

[R2-2304789](C:\\Users\\mtk16923\\Documents\\3GPP Meetings\\202305 - RAN2_122, Incheon\\Extracts\\R2-2304789 Correction on SI update for posSIB-r16.docx" \o "C:\Users\mtk16923\Documents\3GPP Meetings\202305 - RAN2_122, Incheon\Extracts\R2-2304789 Correction on SI update for posSIB-r16.docx) Correction on SI update for posSIB-r16 Huawei, HiSilicon CR Rel-16 38.331 16.12.0 3974 1 F NR\_pos-Core R2-2302985

[R2-2304790](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304790%20Correction%20on%20SI%20update%20for%20posSIB-r17.docx) Correction on SI update for posSIB-r17 Huawei, HiSilicon CR Rel-17 38.331 17.4.0 3975 1 F NR\_pos-Core, NR\_redcap-Core R2-2302986

[R2-2305253](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305253_36305_(0113)_R15_APC.docx) APC clarification for SSR positioning Swift Navigation, Ericsson CR Rel-15 36.305 15.5.0 0113 1 F LCS\_LTE\_acc\_enh-Core R2-2304308

[R2-2305254](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305254_36305_(0114)_R16_APC.docx) APC clarification for SSR positioning Swift Navigation, Ericsson CR Rel-16 36.305 16.4.0 0114 1 A LCS\_LTE\_acc\_enh-Core R2-2304309

[R2-2305255](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305255_36305_(0115)_R17_APC.docx) APC clarification for SSR positioning Swift Navigation, Ericsson CR Rel-17 36.305 17.2.0 0115 1 A LCS\_LTE\_acc\_enh-Core R2-2304310

[R2-2305256](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305256_38305_(0129)_R15_APC.docx) APC clarification for SSR positioning Swift Navigation, Ericsson CR Rel-15 38.305 15.9.0 0129 1 F NR\_newRAT-Core R2-2304311

[R2-2305257](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305257_38305_(0130)_R16_APC.docx) APC clarification for SSR positioning Swift Navigation, Ericsson CR Rel-16 38.305 16.8.0 0130 1 A NR\_newRAT-Core R2-2304312

[R2-2305258](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305258_38305_(0131)_R17_APC.docx) APC clarification for SSR positioning Swift Navigation, Ericsson CR Rel-17 38.305 17.4.0 0131 1 A NR\_newRAT-Core R2-2304313

[R2-2305259](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305259_36305_(0116)_R16_Yaw.docx) Zero Yaw clarification for SSR positioning Swift Navigation, Ericsson CR Rel-16 36.305 16.4.0 0116 1 F NR\_pos-Core R2-2304314

[R2-2305260](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305260_36305_(0117)_R17_Yaw.docx) Zero Yaw clarification for SSR positioning Swift Navigation, Ericsson CR Rel-17 36.305 17.2.0 0117 1 A NR\_pos-Core R2-2304315

[R2-2305261](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305261_38305_(0132)_R16_Yaw.docx) Zero Yaw clarification for SSR positioning Swift Navigation, Ericsson CR Rel-16 38.305 16.8.0 0132 1 F NR\_pos-Core R2-2304316

[R2-2305262](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305262_38305_(0133)_R17_Yaw.docx) Zero Yaw clarification for SSR positioning Swift Navigation, Ericsson CR Rel-17 38.305 17.4.0 0133 1 A NR\_pos-Core R2-2304317

### 5.3.1 General and Stage 2 corrections

Including incoming LSs if any, 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.

### 5.3.2 RRC corrections

Including impact to 36.331, 38.331, and 38.306.

[R2-2306409](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306409%20Discussion%20on%20the%20misalignment%20issue%20in%20location%20measurement%20indication%20procedure.docx) Discussion on the misalignment issue in location measurement indication procedure ZTE Corporation discussion Rel-15 NR\_newRAT-Core

[R2-2306459](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306459%20Clarification%20on%20the%20misalignment%20issue%20in%20location%20measurement%20indication%20procedure.docx) Clarification on the misalignment issue in location measurement indication procedure ZTE Corporation CR Rel-15 38.331 15.21.0 4149 - F NR\_newRAT-Core

[R2-2306460](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306460%20Clarification%20on%20the%20misalignment%20issue%20in%20location%20measurement%20indication%20procedure.docx) Clarification on the misalignment issue in location measurement indication procedure ZTE Corporation CR Rel-16 38.331 16.12.0 4150 - A NR\_newRAT-Core

[R2-2306461](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306461%20Clarification%20on%20the%20misalignment%20issue%20in%20location%20measurement%20indication%20procedure.docx) Clarification on the misalignment issue in location measurement indication procedure ZTE Corporation CR Rel-17 38.331 17.4.0 4151 - A NR\_newRAT-Core

### 5.3.3 LPP corrections

[R2-2306027](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306027.docx) GNSS Troposperic Delay Correction field description Ericsson CR Rel-16 37.355 16.10.0 0451 - F NR\_pos-Core

[R2-2306028](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306028%20SSRgridA.docx) GNSS Troposperic Delay Correction field description Ericsson CR Rel-17 37.355 17.4.0 0452 - A NR\_pos-Core

### 5.3.4 MAC corrections

[R2-2306084](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306084%20Correction%20on%20DL%20MAC%20CE%20for%20SP%20Positioning%20SRS.docx) Correction on DL MAC CE for SP Positioning SRS ZTE Corporation CR Rel-16 38.321 16.11.0 1590 1 F NR\_pos-Core R2-2303501

[R2-2306085](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306085%20Correction%20on%20DL%20MAC%20CE%20for%20SP%20Positioning%20SRS.docx) Correction on DL MAC CE for SP Positioning SRS ZTE Corporation CR Rel-17 38.321 17.4.0 1591 1 A NR\_pos-Core R2-2303502

* [AT122][407][POS] Rel-15/16 positioning CR check (Intel)

Scope: Check the CRs in R2-2306459 / R2-2306460 / R2-2306451 (in light of the exposition in R2-2306409), R2-2306027 / R2-2306028, and R2-2306084 / R2-2306085.

Intended outcome: Agreeable CRs

Deadline: Thursday 2023-05-25 1100 KST

# 6 NR Rel-17

## 6.3 NR Sidelink relay

(NR\_SL\_Relay-Core; leading WG: RAN2; REL-17; WID: RP-212601)

Tdoc Limitation: 2 tdocs

### 6.3.0 In principle agreed CRs

[R2-2306196](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38323_CR0123r1_(Rel-17)_R2-2306196%20Clarification%20on%20the%20services%20expected%20from%20SRAP%20layer.docx) Clarification on the services expected from SRAP layer Huawei, HiSilicon CR Rel-17 38.323 17.4.0 0123 1 F NR\_SL\_relay-Core R2-2303490

[R2-2306197](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38322_CR0052r1_(Rel-17)_R2-2306197%20Clarification%20on%20the%20maximum%20Data%20field%20size%20for%20L2%20U2N%20relay.docx) Clarification on the maximum Data field size for L2 U2N relay Huawei, HiSilicon CR Rel-17 38.322 17.2.0 0052 1 F NR\_SL\_relay-Core R2-2303491

[R2-2306198](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38304_CR0333r3_(Rel-17)_R2-2306198%20Clarification%20on%20sidelink%20communication%20resource%20configuration%20used%20by%20OoC%20L2%20Remote%20UE.docx) Clarification on sidelink communication resource configuration used by OoC L2 Remote UE Huawei, HiSilicon CR Rel-17 38.304 17.4.0 0333 3 F NR\_SL\_relay-Core R2-2304508

[R2-2306199](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38331_CR4064r1_(Rel-17)_R2-2306199%20Miscellaneous%20corrections%20for%20SL%20relay.docx) Miscellaneous corrections for SL relay Huawei, HiSilicon, CATT, ZTE Corporation, Sanechips, vivo, Apple, Nokia, Nokia Shanghai Bell, Philips International B.V. CR Rel-17 38.331 17.4.0 4064 1 F NR\_SL\_relay-Core R2-2304466

### 6.3.1 Control plane and Stage-2 corrections

A single CR with miscellaneous corrections is encouraged. Small editorial corrections should be sent directly to the CR rapporteur. Larger open issues can be discussed with contributions (limited time).

Agenda item summary

R2-2306751 [Pre122][406][Relay] Summary of AI 6.3.1 on Rel-17 relay control plane (Huawei) Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

The following documents will not be individually treated

[R2-2305058](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305058%2038300_Correction_for_NR_sidelink_relay_v1.docx) Miscellaneous corrections for Stage 2 NR sidelink relay Apple CR Rel-17 38.300 17.4.0 0656 1 F NR\_SL\_relay-Core R2-2303384

[R2-2305059](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305059%2038331_Correction_FD_SL_Relay.docx) Correction on field description of sl-DestinationIdentityL2U2N Apple CR Rel-17 38.331 17.4.0 4086 - F NR\_SL\_relay-Core

[R2-2305060](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305060%2038331_Correction_SUI_relay.docx) Corrections on triggering conditons of SUI message for SL relay Apple CR Rel-17 38.331 17.4.0 4087 - F NR\_SL\_relay-Core

[R2-2305212](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305212%20Clarification%20on%20sidelink%20discovery.docx) Clarification on sidelink discovery ZTE, Sanechips CR Rel-17 38.304 17.4.0 0342 - F NR\_SL\_relay-Core

[R2-2305215](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305215.docx) Correction on remote UE’s behavior upon SIB1 reception Xiaomi CR Rel-17 38.331 17.4.0 4092 - F NR\_SL\_relay-Core

[R2-2305243](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305243_UE%20behavior%20when%20the%20NW%20indicates%20not%20supporting%20discovery.docx) UE behavior when the NW indicates not supporting discovery vivo CR Rel-17 38.331 17.4.0 4093 - F NR\_SL\_relay-Core

[R2-2305244](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305244_Correction%20on%20%20L2%20U2N%20Relay%20UE%20behavior%20upon%20upon%20cell%20selection.docx) Correction on L2 U2N Relay UE behavior upon cell selection vivo CR Rel-17 38.331 17.4.0 4094 - F NR\_SL\_relay-Core

[R2-2305274](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38300_CR0674_(Rel-17)_R2-2305274-Correction%20on%20direct%20to%20indirect%20path%20switching.docx) Correction on direct to indirect path switching CATT CR Rel-17 38.300 17.4.0 0674 - F NR\_SL\_relay-Core

[R2-2305275](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38300_CR0675_(Rel-17)_R2-2305275-Correction%20on%20the%20PC5%20unicast%20link%20release%20in%20case%20of%20indirect%20to%20direct%20path%20switching.docx) Correction on the PC5 unicast link release in case of indirect to direct path switching CATT CR Rel-17 38.300 17.4.0 0675 - F NR\_SL\_relay-Core

[R2-2305573](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305573%2038331%20Sidelink%20discovery%20transmission%20upon%20reception%20of%20SIB12.docx) On sidelink discovery transmission upon reception of SIB12 Nokia, Nokia Shanghai Bell CR Rel-17 38.331 17.4.0 4113 - F NR\_SL\_relay-Core

[R2-2305587](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305587%2038300%20Differentiation%20of%20SL%20and%20SD%20RSRP.docx) Differentiation of SD-RSRP and SL-RSRP Nokia, Nokia Shanghai Bell CR Rel-17 38.300 17.4.0 0679 - F NR\_SL\_relay-Core

[R2-2305846](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305846%20Reception%20of%20PC5%20release%20message%20during%20re-establishment%20v1.0.docx) Reception of PC5 release message during re-establishment Lenovo discussion Rel-17 38.331 NR\_SL\_relay-Core

[R2-2305849](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305849-%20CR4118%20Correction%20for%20release%20message%20with%20re-establishment%20v1.0.docx) Correction for release message with re-establishment Lenovo CR Rel-17 38.331 17.4.0 4118 - F NR\_SL\_relay-Core

[R2-2306115](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306115_Corrections%20on%20L2%20U2N%20Relay.docx) Corrections on L2 U2N Relay ASUSTeK CR Rel-17 38.331 17.4.0 4135 - F NR\_SL\_relay-Core

[R2-2306131](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Docs\R2-2306131.zip) Correction on Sidelink Relay discovery procedure Philips International B.V. CR Rel-17 38.331 17.4.0 4137 - F NR\_SL\_relay-Core

[R2-2306194](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38331_CR4140_(Rel-17)_R2-2306194%20RRC%20corrections%20for%20SL%20Relay.docx) RRC corrections for SL Relay Huawei, HiSilicon CR Rel-17 38.331 17.4.0 4140 - F NR\_SL\_relay-Core

[R2-2306498](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306498%20-%2038.331_CR4155_Rel17_Correction%20on%20Sidelink%20Discovery%20Transmissions.docx) Correction on Sidelink Discovery Transmissions Ericsson España S.A. CR Rel-17 38.331 17.4.0 4155 - F NR\_SL\_relay-Core

### 6.3.2 User plane corrections

A single CR with miscellaneous corrections is encouraged. Small editorial corrections should be sent directly to the CR rapporteur for the corresponding spec. Larger open issues can be discussed with contributions (limited time).

[R2-2305211](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305211%20Corrections%20on%20SRAP%20for%20SL%20relay.docx) Corrections on SRAP for SL relay ZTE Corporation, Sanechips CR Rel-17 38.351 17.4.0 0021 - F NR\_SL\_relay-Core

[R2-2305589](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305589%20Corrections%20on%20SRAP%20for%20SL%20relay.docx) Corrections on SRAP for SL relay NEC, Apple, Samsung, ZTE CR Rel-17 38.351 17.4.0 0020 2 F NR\_SL\_relay-Core R2-2304480

[R2-2306195](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\38351_CR0022_(Rel-17)_R2-2306195%20Clarification%20on%20the%20SRAP%20configuration%20used%20in%20SRAP.docx) Clarification on the SRAP configuration used in SRAP Huawei, HiSilicon CR Rel-17 38.351 17.4.0 0022 - F NR\_SL\_relay-Core

## 6.5 NR positioning enhancements

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

Tdoc Limitation: 2 tdocs

### 6.5.0 In principle agreed CRs

[R2-2304792](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304792%20Correction%20to%20UEPositioningAssistanceInformation.docx) Correction to UEPositioningAssistanceInformation Huawei, HiSilicon CR Rel-17 38.305 17.4.0 0124 2 F NR\_pos\_enh-Core R2-2304540

[R2-2304884](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304884%20CR%20to%2038305%20Measurements%20TRP%20AD.docx) Measurements and Assistance Data Transfer Nokia, Nokia Shanghai Bell CR Rel-17 38.305 17.4.0 0126 2 F NR\_pos\_enh-Core R2-2304494

[R2-2304885](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304885%20CR%20to%2038305%20Integrity.docx) Protection Level and Target Integrity Risk Nokia, Nokia Shanghai Bell CR Rel-17 38.305 17.4.0 0127 2 F NR\_pos\_enh-Core R2-2304495

[R2-2304886](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304886%20CR%20to%2037355%20LOS-NLOS%20Indicator_v02.docx) LOS-NLOS-Indicator Types Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-17 37.355 17.4.0 0442 2 F NR\_pos\_enh-Core R2-2304496

[R2-2305131](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305131%20Misc%20LPP%20corrections%20R17%2037355.docx) Miscellaneous corrections on LPP Lenovo CR Rel-17 37.355 17.4.0 0432 1 F NR\_pos\_enh-Core R2-2302884

[R2-2305289](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305289_37355r2_CR0431_(Rel-17).docx) Corrections on applicability of timing error margin of RxTEG in NR-Multi-RTT-SignalMeasurementInformation field descriptions and other Miscellaneous corrections CATT CR Rel-17 37.355 17.4.0 0431 2 F NR\_pos\_enh-Core R2-2304520

[R2-2305290](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305290_38331r2_CR3956_(Rel-17).docx) Corrections on the figure of UE Positioning Assistance Information procedure CATT CR Rel-17 38.331 17.4.0 3956 2 F NR\_pos\_enh-Core R2-2304281

[R2-2305291](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305291_38305r2_CR0123_(Rel-17).docx) Miscellaneous corrections on 38.305 CATT CR Rel-17 38.305 17.4.0 0123 2 F NR\_pos\_enh-Core R2-2304516

[R2-2305444](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305444.docx) Stage 2 procedure for deactivation of MG gap and PPW Intel Corporation CR Rel-17 38.305 17.4.0 0135 1 F NR\_pos\_enh-Core R2-2304463

[R2-2305445](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305445.docx) LPP capability for FGs27-13a,14a and 14-2 Intel Corporation CR Rel-17 37.355 17.4.0 0445 1 F NR\_pos\_enh-Core R2-2304462

[R2-2306018](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306018%20AIP.docx) Update of information transfer from gNB to LMF Ericsson CR Rel-17 38.305 17.4.0 0125 2 F NR\_pos\_enh-Core R2-2304457

### 6.5.1 Corrections

A single CR per TS (Stage-2, RRC, LPP, MAC, UEcap 306) with miscellaneous corrections is encouraged. Small editorial corrections should be sent directly to the CR rapporteur. Larger open issues can be discussed with contributions (limited time).

Incoming LS and draft reply

[R2-2304608](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304608_C4-230655.docx) LS on GNSS integrity requirement parameters definition (C4-230655; contact: Huawei) CT4 LS in Rel-17 5G\_eLCS\_ph2 To:RAN2 Cc:SA2

[R2-2304804](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304804%20Reply%20to%20CT4%20on%20GNSS%20integrity%20requirements.docx) Reply to CT4 on GNSS integrity requirements Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

Agenda item summary

R2-2306675 (AI summary of 6.5.1) CATT discussion Rel-17 NR\_pos\_enh-Core

The following documents will not be individually treated

[R2-2304803](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304803%20Correction%20to%20PosSRS%20transmission%20in%20RRC_INACTIVE.docx) Correction to MAC spec for Positoning Enhancements Huawei, HiSilicon, Ericsson, ZTE CR Rel-17 38.321 17.4.0 1614 - F NR\_pos\_enh-Core

[R2-2305363](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305363%20Correction%20on%20PosSRS-RRC-Inactive-OutsideInitialUL-BWP.docx) Correction on PosSRS-RRC-Inactive-OutsideInitialUL-BWP Huawei, HiSilicon CR Rel-17 38.331 17.4.0 4102 - F NR\_pos\_enh-Core

[R2-2305895](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305895_(Misc%20LPP%20corrections).docx) Miscelaneous LPP Corrections Qualcomm Incorporated (Rapporteur) CR Rel-17 37.355 17.4.0 0448 - F NR\_pos\_enh-Core

[R2-2306025](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306025%20LPPmisc.docx) Miscellaneous corrections and additions Ericsson, Fraunhofer IIS, Fraunhofer HHI CR Rel-17 37.355 17.4.0 0449 - F NR\_pos\_enh-Core

[R2-2306026](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306026%20PeriodicCR.docx) Missing finer periodicities than 1s Ericsson CR Rel-17 37.355 17.4.0 0450 - F NR\_pos\_enh-Core

[R2-2306258](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306258%20CR%20to%2038305%20Alert%20Limit%20Definition%20for%20Integrity.docx) Alert Limit Nokia, Nokia Shanghai Bell CR Rel-17 38.305 17.4.0 0136 - F NR\_pos\_enh-Core

[R2-2306259](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306259%20CR%20to%2037355%20NR-TRP-LocationInfo.docx) NR-TRP-LocationInfo for UE-based DL-TDOA and DL-AoD positioning Nokia, Nokia Shanghai Bell CR Rel-17 37.355 17.4.0 0454 - F NR\_pos\_enh-Core

Withdrawn/Not available

R2-2304802 Correction on PosSRS-RRC-Inactive-OutsideInitialUL-BWP-r17 Huawei, HiSilicon CR Rel-17 38.306 17.4.0 0910 - F NR\_pos\_enh-Core Withdrawn

R2-2306086 Correction on Location measurement indication for positioning ZTE Corporation CR Rel-17 38.331 17.4.0 4129 - F NR\_pos\_enh-Core Withdrawn

R2-2306087 Discussion on Location measurement indication for positioning ZTE Corporation discussion Rel-17 38.331 NR\_pos\_enh-Core Withdrawn

# 7 Rel-18

## 7.2 Expanded and improved NR positioning

(NR\_pos\_enh2; leading WG: RAN1; REL-18; WID: RP-223549)

Time budget: 2 TU

Tdoc Limitation: 4 tdocs

### 7.2.1 Organizational

Including incoming LSs and rapporteur inputs.

Incoming LS with RAN2 in Cc:

[R2-2304650](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304650_S2-2305726.docx) Reply LS to Reply LS to LS on SL positioning groupcast and broadcast (S2-2305726; contact: Xiaomi) SA2 LS in Rel-18 Ranging\_SL To:SA3 Cc:RAN2

Incoming LSs with “take into account” actions

[R2-2304614](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304614_R1-2304147.docx) Reply LS to RAN2 on error source distributions (R1-2304147; contact: InterDigital) RAN1 LS in Rel-18 NR\_pos\_enh2 To:RAN2

[R2-2304615](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304615_R1-2304152.docx) Reply LS on RAN dependency for Ranging & Sidelink Positioning (R1-2304152; contact: Xiaomi) RAN1 LS in Rel-18 NR\_pos\_enh2 To:RAN2 Cc:SA2

[R2-2304657](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304657_S3-232232.docx) Reply LS on LPP message and supplementary service event report over a user plane connection between UE and LMF and LS on UE event reporting over a user plane connection to LCS client or AF (S3-232232; contact: Ericsson) SA3 LS in Rel-18 5G\_eLCS\_Ph3 To:SA2, RAN2, CT1, CT3, CT4

Other incoming LSs

[R2-2304647](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304647_S2-2303837.docx) LS on support of multiple Target UEs (S2-2303837; contact: Qualcomm) SA2 LS in Rel-18 Ranging\_SL To:RAN2 Cc:RAN1

[R2-2304651](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Docs\R2-2304651.zip) Reply LS to LS to SA2 on Sidelink positioning procedure (S2-2305735; contact: Xiaomi) SA2 LS in Rel-18 Ranging\_SL To:RAN2, RAN1 Cc:SA3

Draft replies

[R2-2305729](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305729%20Draft%20Reply%20LS%20%20to%20SA2%20on%20Sidelink%20positioning%20procedure.docx) Draft Reply LS to SA2 on Sidelink positioning procedure Xiaomi LS out Rel-18 To:RAN1

[R2-2306387](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306387_(Support%20of%20Multiple%20Target%20UEs%20for%20Sidelink%20Positioning).docx) Support of Multiple Target UEs for Sidelink Positioning (draft response LS to R2-2302448 (S2-2303837)) Qualcomm Incorporated discussion

Work plan

[R2-2306253](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306253%20Work%20Plan%20for%20Rel-18%20WI%20on%20Expanded%20and%20Improved%20NR%20Positioning.docx) Work Plan on Rel-18 Positioning Work Item CATT, Intel Corporation, Ericsson Work Plan Rel-18

TS 38.355

[R2-2305438](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305438.docx) Further considerations on SLPP specification Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2305439](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Docs\R2-2305439.zip) TS 38.355 v0.0.3 Intel Corporation draft TS Rel-18 38.355 0.0.3 NR\_pos\_enh2

Running CRs (excluding TS 38.355 draft)

[R2-2304769](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304769%20LPP%20running%20CR%20for%20RAT-dependent%20integrity.docx) LPP running CR for RAT-dependent integrity CATT draftCR Rel-18 37.355 17.4.0 B NR\_pos\_enh2

[R2-2305896](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305896_(Running%20Stage%202%20CR)_v00.docx) Running Stage 2 CR for 'Expanded and improved NR positioning' Qualcomm Incorporated draftCR Rel-18 38.305 17.4.0 B NR\_pos\_enh2-Core

### 7.2.2 Sidelink positioning

Positioning architecture and signalling procedures (e.g. configuration, measurement reporting, etc) to enable sidelink positioning. Including measurements to enable RTT-based positioning, SL-AoA, and SL-TDOA; signalling and associated UE behaviour for support of unicast, groupcast (not including many-to-one) and broadcast of SL-PRS transmissions; reporting signalling and procedures to facilitate support of SL positioning in all coverage scenarios and for PC5-only and joint PC5-Uu scenarios; and signalling to NG-RAN for SL positioning and service authorization as needed.

Agenda item summary and report of [AT122][401]

R2-2306757 [Pre122][401][POS] Summary of AI 7.2.2 on sidelink positioning (Xiaomi) Xiaomi discussion Rel-18

* [AT122][401][POS] Sidelink positioning summary proposals (Xiaomi)

Scope: Discuss and gauge support on the proposals in R2-2306757, converge on easily agreeable parts, and identify discussion points for the online session on Wednesday 2023-05-24.

Intended outcome: Summary to online session in R2-2306671

Deadline: Tuesday 2023-05-23 2000 KST

The following tdocs will not be individually treated

[R2-2304716](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304716.docx) Discussion of signalling procedures Nokia, Nokia Shanghai Bell discussion Rel-18

[R2-2304717](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304717.docx) Session-less SL positioning and groupcast / broadcast messaging Nokia, Nokia Shanghai Bell discussion Rel-18

[R2-2304770](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304770%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning CATT discussion Rel-18 NR\_pos\_enh2

[R2-2304801](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304801%20Discussion%20on%20sidelink%20positioning_v02.docx) Discussion on Sidelink Positioning Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

[R2-2304949](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304949_Sidelink_Fraunhofer.docx) UE Positioning using Sidelink Fraunhofer IIS, Fraunhofer HHI discussion R2-2302588

[R2-2305066](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305066-SL-PRS-config-v0.docx) SL PRS configuration Apple discussion Rel-18 NR\_pos\_enh2

[R2-2305067](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305067-pos-broadcast-v0%202.docx) SL positioning groupcast and broadcast Apple discussion Rel-18 NR\_pos\_enh2

[R2-2305068](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305068-reply-LS-on-SL-POS-security.docx) [DARFT] Reply LS on SL positioning groupcast and broadcast Apple LS out Rel-18 NR\_pos\_enh2 To:SA3 Cc:SA2

[R2-2305137](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305137%20SLPP%20and%20session%20aspects.doc) Further discussion on SLPP and session-based SL positioning Lenovo discussion Rel-18 NR\_pos\_enh2

[R2-2305331](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305331%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2305343](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305343%20Further%20discussion%20on%20sidelink%20positioning.docx) Further discussion on sidelink positioning OPPO discussion Rel-18 NR\_pos\_enh2

[R2-2305344](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305344%20Further%20discussion%20on%20%20anchor%20UE%20reselection%20for%20sidelink%20positioning.doc) Further discussion on anchor UE reselection for sidelink positioning OPPO discussion Rel-18 NR\_pos\_enh2

[R2-2305392](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305392_SLPosArch.docx) On SL Positioning Architecture Aspects Lenovo discussion Rel-18

[R2-2305440](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305440.docx) Further considerations on sidelink positioning Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2305509](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305509_SL_Pos_Res.docx) Considerations on sidelink positioning resources Sony discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2305562](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305562%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning Spreadtrum Communications discussion Rel-18

[R2-2305636](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305636%20Considerations%20on%20Sidelink%20positioning.doc) Considerations on Sidelink positioning CMCC discussion Rel-18 NR\_pos\_enh2

[R2-2305730](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305730%20Draft%20Reply%20LS%20%20to%20SA3%20on%20SL%20positioning%20groupcast%20and%20broadcast.docx) Draft Reply LS to SA3 on SL positioning groupcast and broadcast Xiaomi LS out Rel-18 To:RAN1

[R2-2305731](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305731%20Discussion%20on%20SL%20positioning.doc) Discussion on SL positioning Xiaomi discussion Rel-18

[R2-2305768](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305768%20(R18%20NR%20POS%20A722%20SL%20POS).docx) Discussion on Sidelink positioning InterDigital Inc. discussion Rel-18 NR\_pos\_enh2

[R2-2305867](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305867.docx) LMF roles and protocols for sidelink positioning MediaTek Inc. discussion NR\_pos\_enh2-Core

[R2-2306020](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306020%20Sidelink.docx) Sidelink positioning Ericsson discussion Rel-18

[R2-2306078](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306078%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2306145](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306145%20(7.2.2)%20SLPP%20design%20in%20session%20perspectives.docx) SLPP design for session aspects Samsung R&D Institute UK discussion

[R2-2306334](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306334%20SLPP%20session%20management%20and%20operation.docx) SLPP session management and operation LG Electronics Inc. discussion Rel-18

[R2-2306335](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306335%20SLPP%20reliable%20transport%20functionality.docx) SLPP reliable transport functionality LG Electronics Inc. discussion Rel-18

[R2-2306336](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306336%20Sidelink%20positioning%20parameters%20for%20Anchor%20UE%20selection.docx) Sidelink positioning parameters for Anchor UE selection LG Electronics Inc. discussion Rel-18

[R2-2306373](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306373%20Discussion%20on%20sidelink%20positioning%20parameters%20in%20discovery%20signalling.doc) Discussion on Sidelink positioning parameters in discovery signalling Samsung discussion Rel-18 NR\_pos\_enh2

[R2-2306422](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306422_(Sidelink%20Positioning).docx) Sidelink Positioning Protocol (SLPP) Signaling and Procedures Qualcomm Incorporated discussion

[R2-2306446](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306446-Further%20discussion%20on%20SL%20positioning%20procedures%20and%20signaling%20protocols%20for%20SL%20positioning.docx) Further discussion on SL positioning procedures and signaling protocols for SL positioning CEWiT discussion

[R2-2306457](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306457%20SL%20pos%20server.doc) On the support of SL positioning server functionality Philips International B.V. discussion NR\_pos\_enh2 R2-2304182

[R2-2306515](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306515_On%20the%20selection%20of%20Anchor%20UEs%20for%20Sidelink%20Positioning.doc) On the selection of Anchor UEs for Sidelink Positioning Philips International B.V. discussion NR\_pos\_enh2 R2-2303753

### 7.2.3 RAT-dependent integrity

Error modelling parameters, signalling, and procedures to support UE-based and LMF-based integrity of RAT-dependent positioning methods.

[R2-2304771](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304771%20Discussion%20on%20RAT-Dependent%20integrity.docx) Discussion on RAT-dependent Integrity CATT discussion Rel-18 NR\_pos\_enh2

[R2-2304800](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304800%20Discussion%20on%20RAT-dependent%20integrity_final.docx) Discussion on RAT-dependent Integrity Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

[R2-2305332](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305332%20Signaling%20design%20of%20UE-based%20RAT-dependent%20integrity.docx) Signaling design of UE-based RAT-dependent integrity vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2305341](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305341%20Consideration%20on%20RAT-dependent%20positioning%20integrity.docx) Consideration on RAT-dependent positioning integrity OPPO discussion Rel-18 NR\_pos\_enh2

[R2-2305441](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305441.docx) Further considerations on RAT dependent integrity Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2305563](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305563%20Discussion%20on%20RAT-dependent%20integrity.docx) Discussion on RAT-dependent integrity Spreadtrum Communications discussion Rel-18

[R2-2305624](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305624.docx) Discussion on the RAT-dependent integrity issues CMCC discussion Rel-18 NR\_pos\_enh2

[R2-2305642](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305642%20(R18%20NR%20POS%20A723%20RAT%20dependent%20integrity).docx) Discussion on RAT dependent integrity InterDigital, Inc. discussion Rel-18

[R2-2305668](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305668%20Discussion%20on%20RAT-dependent%20positioning%20integrity.doc) Discussion on RAT-dependent positioning integrity Xiaomi discussion

[R2-2305709](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305709%20Discussion%20on%20RAT-dependent%20integrity.doc) Discussion on RAT-dependent integrity Lenovo discussion Rel-18

[R2-2305823](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305823_(integrity).docx) Integrity of NR Positioning Technologies Qualcomm Incorporated discussion

[R2-2306022](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306022%20Integrity.docx) RAT Dependent positioning Integrity Ericsson discussion Rel-18

[R2-2306076](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306076%20Discussion%20on%20RAT-dependent%20methods%20positioning%20integrity.docx) Discussion on RAT-dependent methods positioning integrity ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2306255](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306255%20LMF-based%20integrity.docx) LMF-based Integrity Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_pos\_enh2-Core

### 7.2.4 LPHAP

Enhancements for enabling LPHAP use case 6 (TS 22.104), including extending eDRX cycle (coordinated with RedCap WI); SRS configuration enhancements based on validity area for UEs in RRC\_INACTIVE; DL-PRS measurements in RRC\_IDLE and reporting in RRC\_CONNECTED; and alignment between eDRX and PRS configurations.

Agenda item summary

R2-2306540 Summary of AI 7.2.4: LPHAP Qualcomm Incorporated discussion

The following tdocs will not be individually treated

[R2-2304772](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304772%20Discussion%20on%20LPHAP.docx) Discussion on LPHAP CATT discussion Rel-18 NR\_pos\_enh2

[R2-2304799](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304799%20Discussion%20on%20LPHAP_final.docx) Discussion on LPHAP Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

[R2-2304887](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304887%20PRS%20and%20DRX%20configuration%20alignment.docx) PRS and DRX configuration alignment Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_pos\_enh2-Core R2-2304059

[R2-2304950](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304950_LPHAP_Fraunhofer.docx) Enhancements for supporting LPHAP Fraunhofer IIS, Fraunhofer HHI discussion R2-2302589

[R2-2305069](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305069-PRS-DRX-alignment-v0.docx) Alignment between DRX and PRS Apple discussion Rel-18 NR\_pos\_enh2

[R2-2305333](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305333%20Discussion%20on%20solution%20of%20LPHAP.doc) Discussion on solution of LPHAP vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2305342](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305342%20Discussion%20on%20LPHAP.docx) Discussion on LPHAP OPPO discussion Rel-18 NR\_pos\_enh2

[R2-2305442](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305442.docx) Further considerations on LPHAP Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2305510](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305510_LPHAP.docx) Considerations on Low Power High Accuracy Positioning Sony discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2305564](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305564%20Discussion%20on%20LPHAP.docx) Discussion on LPHAP Spreadtrum Communications discussion Rel-18

[R2-2305637](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305637%20Considerations on LPHAP.doc) Considerations on LPHAP CMCC discussion Rel-18 NR\_pos\_enh2

[R2-2305644](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305644%20(R18%20NR%20POS%20A724%20LPHAP).doc) Discussion on LPHAP InterDigital, Inc. discussion Rel-18

[R2-2305669](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305669%20Discussion%20on%20LPHA%20positioning.doc) Discussion on LPHA positioning Xiaomi discussion

[R2-2305710](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305710%20Discussion%20on%20low%20power%20high%20accuracy%20positioning.doc) Discussion on low power high accuracy positioning Lenovo discussion Rel-18

[R2-2305822](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305822_(LPHAP).docx) Enhancements for LPHAP Qualcomm Incorporated discussion

[R2-2306021](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306021%20LPHAP.docx) Discussion on Low Power High Accuracy Positioning Ericsson discussion Rel-18

[R2-2306075](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306075%20Discussion%20on%20LPHAP.docx) Discussion on LPHAP ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2306447](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306447_Discussion%20on%20SRS%20configuration%20in%20RRC_INACTIVE.docx) Discussion on SRS configuration in RRC\_INACTIVE Samsung discussion Rel-18 FS\_NR\_pos\_enh2

### 7.2.5 RedCap positioning, carrier phase positioning, and bandwidth aggregation for positioning

RAN1 led objectives that may require progress in RAN1 before RAN2 can take decisions. This agenda item will be treated at lower priority.

[R2-2304773](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304773%20Discussion%20on%20carrier%20phase%20positioning%20bandwidth%20aggregation%20for%20positioning%20and%20Redcap%20positioning.docx) Discussion on carrier phase positioning, bandwidth aggregation for positioning and Redcap positioning CATT discussion Rel-18 NR\_pos\_enh2

[R2-2305315](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305315%20Discussion%20on%20RAN1%20led%20positioning%20topics.docx) Discussion on RAN1 led positioning topics Huawei, HiSilicon discussion Rel-18

[R2-2305334](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305334%20on-demand%20PRS%20for%20PRS%20bandwidth%20aggregation.docx) on-demand PRS for PRS bandwidth aggregation vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2305443](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305443.docx) Considerations on other RAN1 led items Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2305625](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305625.docx) Discussion on the RedCap UE positioning CMCC discussion Rel-18 NR\_pos\_enh2

[R2-2305645](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305645%20(R18%20NR%20POS%20A725%20Others).docx) Discussion on positioning for RedCap positioning, carrier phase positioning, and bandwidth aggregation for positioning InterDigital, Inc. discussion Rel-18

[R2-2305670](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305670%20Discussion%20on%20RedCap%20UE%20positioning.doc) Discussion on RedCap UE positioning Xiaomi discussion

[R2-2306023](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306023%20RedCap.docx) RedCap positioning, carrier phase positioning, and bandwidth aggregation for positioning Ericsson discussion Rel-18

[R2-2306077](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306077%20Discussion%20on%20BW%20aggregation%20and%20RedCap%20positioning.docx) Discussion on BW aggregation and RedCap positioning ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2306448](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306448_Discussion%20on%20bandwidth%20aggregation.docx) Discussion on bandwidth aggregation Samsung discussion Rel-18 FS\_NR\_pos\_enh2

## 7.9 Enhanced NR Sidelink Relay

(NR\_SL\_relay\_enh-Core; leading WG: RAN2; REL-18; WID: RP-223501)

Time budget: 1.5 TU

Tdoc Limitation: 4 tdocs

### 7.9.1 Organizational

Including incoming LSs and rapporteur inputs.

Incoming LSs with “take into account” actions

[R2-2304617](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304617_R1-2304211.docx) Reply LS on comparison of SL-RSRP and SD-RSRP measurements (R1-2304211; contact: Nokia) RAN1 LS in Rel-18 NR\_SL\_relay\_enh-Core To:RAN2 Cc:RAN4

[R2-2304637](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304637_R4-2306366.docx) LS on Comparison of SL-RSRP and SD-RSRP measurements (R4-2306366; contact: Nokia) RAN4 LS in Rel-18 NR\_SL\_relay\_enh To:RAN2 Cc:RAN1

Other incoming LSs

[R2-2304646](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304646_S2-2207518.docx) LS on ProSe Authorization information related to UE-to-UE Relay operation to NG-RAN (S2-2207518; contact: LGE) SA2 LS in Rel-18 FS\_5G\_ProSe\_Ph2, NR\_SL\_relay\_enh To:RAN2, RAN3

[R2-2304652](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304652_S2-2305915.doc) Reply LS on 5G ProSe Layer-2 UE-to-UE Relay QoS enforcement (S2-2305915; contact: Qualcomm) SA2 LS in Rel-18 5G\_ProSe\_Ph2 To:RAN2

Draft CR

[R2-2305207](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305207-Draft%20running%20CR%2038.300.docx) Draft running CR 38.300 (initial) LG Electronics France draftCR Rel-18 38.300 17.4.0 B NR\_SL\_relay-Core

* Revised in R2-2306554

R2-2306554 Draft running CR 38.300 (update) LG Electronics France draftCR Rel-18 38.300 17.4.0 Bz NR\_SL\_relay-Core

Withdrawn/Not available

R2-2305208 Draft running CR 38.300 (update) LG Electronics France draftCR Rel-18 38.300 17.4.0 Bz NR\_SL\_relay-Core

* Withdrawn

### 7.9.2 UE-to-UE relay

Single-hop Layer-2 and Layer-3 UE-to-UE relay for unicast. Including common L2/L3 functionality comprising relay discovery and (re)selection and L2-specific functionality including adaptation layer design, control plane procedures, and QoS handling if needed.

Agenda item summary

R2-2306555 Summary of AI 7.9.2 on UE-to-UE relay ZTE, Sanechips discussion Rel-18 NR\_SL\_relay\_enh-Core

The following tdocs will not be individually treated

[R2-2304680](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304680%20SRAP%20design%20and%20Connection%20establishment.docx) SRAP design and Connection establishment NEC discussion NR\_SL\_relay\_enh-Core

[R2-2304754](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304754%20-%20Discussion%20on%20U2U%20Relay.docx) Discussion on U2U relay OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2304957](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304957%20Discussion%20on%20the%20adaptation%20layer_v2.doc) Discussion on the adaptation layer Fujitsu discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305043](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305043%20Further%20discussion%20on%20U2U%20Relay.doc) Further discussion on U2U Relay ZTE, Sanechips discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305062](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305062%20Discussion%20on%20U2U%20relay%20issues.doc) Discussion on UE-to-UE Relay Apple discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305180](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305180%20(R18%20SL%20Relay%20WI_AI792%20RelayDiscoverySelection).doc) Discovery and Relay Selection for UE-to-UE Relays InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305181](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305181%20(R18%20SL%20Relay%20WI_AI792%20U2U%20Relays).doc) QoS and Adaptation Layer for UE-to-UE Relays InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305210](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305210-Control%20plane%20procedure%20and%20adaptaion%20layer%20for%20U2U%20relay.docx) Control plane procedure and adaptaion layer for U2U relay LG Electronics France discussion Rel-18

[R2-2305233](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305233+Discussion%20on%20NR%20sidelink%20U2U%20relay.doc) Discussion on U2U sidelink relay China Telecom discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305245](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305245_Discussion%20on%20the%20common%20L2%20L3%20parts%20for%20U2U%20relaying.docx) Discussion on the common L2 L3 parts for U2U relaying vivo discussion

[R2-2305246](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305246_%20Discussion%20on%20the%20L2%20specific%20parts%20for%20U2U%20relaying.docx) Discussion on the L2 specific parts for U2U relaying vivo discussion

[R2-2305279](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305279%20Disussion%20on%20U2U%20Relay.docx) Discussion on U2U Relay CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305519](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305519.doc) UE-to-UE relay (re)selection Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2305520](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305520%20Relay_DRX.docx) Discussion on DRX for Sidelink UE to UE Relay Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2305547](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305547_Discussion_on_Relay_reselection_Discovery.docx) Discussion on Relay (re)selection and Discovery Ericsson España S.A. discussion Rel-18

[R2-2305548](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305548_Control_Plane_Procedures_for_L2_U2U_relays.docx) Control Plane Procedures for Layer 2 UE-to-UE Relays Ericsson España S.A. discussion Rel-18

[R2-2305551](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305551.doc) Discussion on UE-to-UE relay Spreadtrum Communications discussion Rel-18

[R2-2305590](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305590%20Further%20issues%20on%20U2U%20relay.docx) Considerations on U2U relay (re)selection and Local ID assignment Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_SL\_relay\_enh-Core R2-2302791

[R2-2305618](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305618%20Discussion%20on%20U2U%20relay.docx) Discussion on U2U relay CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305697](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305697%20Discussion%20on%20L2%20U2U%20relay%20v1.0.docx) Discussion on L2 U2U relay Lenovo discussion Rel-18

[R2-2305743](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305743%20QoS%20split%20and%20Bearer%20configuration.doc) QoS split and Bearer configuration Samsung discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305762](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305762-Layer-2%20specific%20part%20on%20U2U%20Relay.docx) Layer-2 specific part on U2U Relay Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

[R2-2305763](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305763-gNB%20involvement%20on%20U2U%20relay.docx) gNB involvement on U2U relay Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

[R2-2305802](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305802%20SRAP%20design%20for%20U2U%20sidelink%20relay.doc) SRAP design for U2U Sidelink Relay Samsung R&D Institute UK discussion

[R2-2305874](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305874_U2U_relay.docx) Considerations for U2U L2 relay operations Kyocera discussion

[R2-2306125](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306125%20Discussion%20on%20aspects%20of%20AS%20layer%20configuration%20for%20L2%20U2U%20Relay.docx) Discussion on aspects of AS layer configuration for L2 U2U Relay ASUSTeK discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306126](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306126%20Discussion%20on%20E2E%20PC5-RRC%20configurations.docx) Discussion on E2E PC5-RRC configurations ASUSTeK discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306191](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306191%20Discussion%20on%20UE-to-UE%20relay.doc) Discussion on UE-to-UE relay Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306378](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306378%20Discussion%20on%20L2%20U2U%20Relay%20v01.docx) Discussion on L2 U2U Relay MediaTek Inc. discussion Rel-18

[R2-2306380](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306380-U2U.doc) Remaining issues for U2U relay Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306427](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306427%20-%20U2U%20relay.docx) U2U Relay UE discovery / (re)selection, SRAP, QoS Handling Beijing Xiaomi Mobile Software discussion Rel-18 NR\_SL\_relay\_enh-Core

### 7.9.3 Service continuity enhancements for L2 UE-to-network relay

Inter-gNB direct/indirect path switching; intra-gNB indirect/indirect path switching; and inter-gNB indirect/indirect path switching, to be supported by reuse of solutions for the other scenarios.

Agenda item summary

[R2-2306559](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306559%20Summary%20of%20AI%207.9.3%20on%20service%20continuity.docx) Summary of AI 7.9.3 on service continuity (vivo) vivo discussion

The following tdocs will not be individually treated

[R2-2304681](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304681%20Draft%20LS%20to%20RAN3%20on%20Lossless%20Path%20Switching.docx) DRAFT LS for Draft LS to RAN3 on Lossless Path Switching for Sidelink Relay NEC LS out Rel-18 NR\_SL\_relay\_enh-Core To:RAN3

[R2-2304755](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304755%20-%20Discussion%20on%20lossless%20data%20forwarding%20for%20inter-gNB%20service%20continuity.docx) Discussion on lossless data forwarding for inter-gNB service continuity OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305025](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305025%20Discussion%20on%20lossless%20path%20switching%20for%20Sidelink%20Relay.docx) Discussion on lossless path switching for Sidelink Relay CANON Research Centre France discussion Rel-18

[R2-2305044](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305044%20Further%20discussion%20on%20service%20continuity%20for%20SL%20relay.doc) Further discussion on service continuity for SL relay ZTE, Sanechips discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305063](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305063%20Discussion%20on%20service%20continuity%20enhancement%20of%20L2%20U2N%20relay.doc) Discussion on Service continuity enhancement of L2 U2N relay Apple discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305182](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305182%20(R18%20SL%20Relay%20WI_AI793%20ServiceContinuity).doc) Remaining Issues on Service Continuity InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305209](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305209-SL%20U2N%20relay%20for%20the%20service%20continuity%20enhancement.docx) SL U2N relay for the service continuity enhancement LG Electronics France discussion Rel-18

[R2-2305217](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305217.docx) Discussion on service continuity enhancement Xiaomi discussion

[R2-2305234](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305234_Discussion%20on%20lossless%20delivery%20solution%20for%20inter-gNB%20path%20switching.docx) Discussion on lossless delivery solution for inter-gNB path switching China Telecom discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305247](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305247_Remaining%20issues%20on%20service%20continuity%20enhancement%20for%20L2%20U2N%20relay.docx) Remaining issues on service continuity enhancement for L2 U2N relay vivo discussion

[R2-2305280](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305280%20Further%20Consideration%20on%20Service%20Continuity%20Enhancements%20for%20L2%20U2N%20Relay.docx) Further Consideration on Service Continuity Enhancements for L2 U2N Relay CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305419](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305419%20DiscusionRSRP-LSs.docx) Discussion on reply LSs on RSRP issues (R1-2304211 / R2-2304617 and R4-2306366 / R2-2304637) Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_SL\_relay\_enh

[R2-2305420](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305420%20SL%20Relay%20Service%20Continuity.docx) Discussion on L2 U2N relay service continuity issues for inter-gNB path switch Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_SL\_relay\_enh

[R2-2305521](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305521.doc) Service continuity enhancements for UE sidelink relay Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2305549](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305549_Discussion_on_Inter_gNB_Service_Continuity.docx) Discussion on Inter-gNB Service Continuity Ericsson España S.A. discussion Rel-18

[R2-2305552](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305552.doc) Service continuity enhancements support for L2 U2N relay Spreadtrum Communications discussion Rel-18

[R2-2305585](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305585_Service%20Continuity%20Enhancements%20and%20Lossless%20Data%20Delivery.docx) Service Continuity Enhancements and Lossless Data Delivery NEC Corporation discussion NR\_SL\_relay\_enh-Core

[R2-2305619](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305619%20Discussion%20on%20service%20continuity.docx) Discussion on service continuity CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305761](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305761%20Lossless%20Inter-gNB%20path%20switching%20v1.0.docx) Lossless Inter-gNB path switching Lenovo discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305764](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305764%20Evaluation%20and%20proposals%20on%20U3%20and%20U5%20_r2.docx) Evaluation and proposals on U3 and U5 Qualcomm Incorporated, OPPO, Xiaomi discussion NR\_SL\_relay\_enh-Core

[R2-2305979](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305979%20Discussion%20on%20service%20continuity.docx) Discussion on Service Continuity Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306260](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306260%20Remaining%20issues%20for%20service%20continuity.docx) Remaining issues for service continuity MediaTek Inc. discussion Rel-18

[R2-2306374](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306374%20Discussion%20on%20Event%20Z2.doc) Discussion on Event Z2 Samsung discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306381](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306381-U2N-lossless.doc) remaining issues for i2x path switching with lossless delivery Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306383](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306383-U2N_Discussion%20on%20remaining%20issues%20for%20path%20switching.doc) Discussion on remaining issues for path switching Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

### 7.9.4 Multi-path relaying

Mechanisms to support multi-path scenarios where a UE is connected to the same gNB using one direct path and one indirect path via 1) Layer-2 UE-to-Network relay, or 2) via another UE (where the UE-UE inter-connection is assumed to be ideal). This agenda item will include a rapporteur contribution summarising open issues from RAN2#121 (invited contribution not counted against the tdoc limit).

Agenda item summary and report of [AT122][402]

[R2-2306556](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306556%20-%20Summary%20of%20%5bPre122%5d%5b403%5d%5bRelay%5d%20Summary%20of%20AI%207.9.4%20on%20multi-path%20relay%20(OPPO).docx) [Pre122][403][Relay] Summary of AI 7.9.4 on multi-path relay (OPPO) OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

* [AT122][402][Relay] Multi-path relay summary proposals (OPPO)

Scope: Discuss and gauge support on the proposals in R2-2306556, converge on easily agreeable parts, and identify discussion points for the online session on Tuesday 2023-05-23.

Intended outcome: Summary to online session in R2-2306672

Deadline: Tuesday 2023-05-23 1100 KST

The following tdocs will not be individually treated

[R2-2304664](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304664%20-%20Discussion%20on%20multi-path%20Relay_V01.docx) Discussion on multi-path SL relay OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2304958](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304958%20Discussions%20on%20Multi-path_v2.docx) Discussions on multi-path Fujitsu discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305008](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305008_SLRelay_S1&2_v2.doc) Discussion sidelink relay enhancement for scenario 1&2 Samsung discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305045](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305045%20Discussion%20on%20the%20RAN2%20impacts%20of%20multi-path%20relaying%20with%20CUDU%20split%20architecture.docx) Discussion on the RAN2 impacts of multi-path relaying with CU/DU split architecture ZTE, OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305046](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305046%20Further%20discussion%20on%20the%20support%20of%20multi-path%20relaying.docx) Further discussion on the support of multi-path relaying ZTE, Sanechips discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305064](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305064%20Discussion%20on%20control%20plan%20design%20for%20Multi-path.doc) Discussion on Multi-path Relay Apple discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305183](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305183%20(R18%20SL%20Relay%20WI_AI794%20MultipathAspects).doc) Design Aspects for Multi-path InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305218](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305218.docx) Discussion on multi-path Xiaomi discussion

[R2-2305232](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305232%20Discussion%20on%20the%20mode%201%20RA%20issue%20under%20multi-path%20scenario.docx) Discussion on the mode 1 RA issue under multi-path scenario NEC, Nokia,OPPO,ZTE,Huawei, HiSilicon, Sharp, Samsung, Philips, MediaTek discussion NR\_SL\_relay\_enh-Core

[R2-2305235](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305235%20Discussion%20on%20remaining%20issues%20of%20multi-path%20relaying.docx) Discussion on remaining issues of multi-path relaying China Telecom discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305248](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305248_Remaining%20Issues%20for%20Multi-path%20Scenario%201%202.docx) Remaining Issues for Multi-path Scenario-1 and Scenario-2 vivo discussion

[R2-2305281](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305281_Discussion%20on%20Multi-path%20Scenario1.docx) Discussion on Multi-path Scenario 1 CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305282](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305282_Leftover%20issues%20on%20Multi-path%20scenario2.docx) Leftover issues on Multi-path scenario2 CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305522](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305522.doc) Multi-path relaying discussion Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2305550](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305550_Discussion_on_multipath%20relays.docx) Discussion on Multipath Relays Ericsson España S.A. discussion Rel-18

[R2-2305553](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305553.doc) Discussion on multi-path relaying Spreadtrum Communications discussion Rel-18

[R2-2305586](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305586_Discussion%20on%20Multi-path%20Relaying.docx) Discussion on Multi-path Relaying NEC Corporation discussion NR\_SL\_relay\_enh-Core

[R2-2305620](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305620%20Discussion%20on%20multi-path%20scenario%201.docx) Discussion on multi-path scenario 1 CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305621](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305621%20Considerations%20on%20multi-path%20scenario%202.docx) Considerations on multi-path scenario 2 CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305698](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305698%20Procedure%20for%20second%20path%20addition%20v1.0.docx) Procedure for second path addition Lenovo discussion Rel-18

[R2-2305765](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305765-Address%20contravercial%20issues%20for%20MP%20relay.docx) Address controversial issues on multi-path relay Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

[R2-2305873](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305873_multipath_relay.docx) Considerations for multipath relay operations for Scenario 1 Kyocera discussion

[R2-2305945](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305945%20Discussion%20on%20Multi-path%20relaying.docx) Discussion on Multi-path relaying Lenovo discussion NR\_SL\_relay\_enh-Core

[R2-2306127](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306127%20Resource%20allocation%20and%20BSR%20reporting%20for%20multi-path.docx) Resource allocation and BSR reporting for multi-path ASUSTeK discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306192](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306192%20Remaining%20issues%20on%20multi-path%20operation.docx) Remaining issues on multi-path operation Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306310](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306310_Discussion%20on%20multi-path%20scenario%201_III.docx) Discussion on multi-path scenario 1 III discussion NR\_SL\_relay\_enh-Core

[R2-2306313](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306313%20Multipath%20SL%20relay.docx) Multipath SL relay Nokia, Nokia Shanghai Bell discussion

[R2-2306355](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306355%20Multi-path%20relaying%20for%20NR%20sidelink%20relay%20enhancements.doc) Multi-path relaying for NR sidelink relay enhancements LG Electronics France discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306382](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306382-MP.doc) Remaining issues for multi-path relay Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2306445](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306445%20Discussion%20on%20Multipath%20v01.docx) Discussion on Multipath MediaTek Inc. discussion Rel-18

[R2-2306497](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306497_SL-MP-Relaying_ThroughputEnhancements.docx) About Throughput Enhancements in Sidelink Multi-Path Relaying Fraunhofer IIS, Fraunhofer HHI discussion Rel-18 NR\_SL\_relay\_enh

### 7.9.5 DRX

Study the gains and, if needed, specify signalling between gNB and relay UE in sidelink mode 2 to assist the determination of the sidelink DRX configuration used for remote UE. This agenda item will be handled at lower priority.

[R2-2304756](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304756%20-%20Discussion%20on%20DRX%20for%20L2%20U2N%20relay.docx) Discussion on DRX for L2 U2N relay OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305065](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305065%20Discussion%20on%20SL-DRX.doc) Discussion on SL DRX for L2 UE-to-NW relay Apple discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2305219](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305219.docx) Discussion on SL DRX in U2N relay Xiaomi discussion

[R2-2305592](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305592%20Considerations%20on%20paging%20for%20sidelink%20relay.docx) Considerations on paging for sidelink relay Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay\_enh-Core

[R2-2306193](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306193%20Left%20issues%20on%20sidelink%20DRX%20for%20L2%20U2N%20relay.doc) Left issues on sidelink DRX for L2 U2N relay Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

## 7.24 NR TEI18

Specific items may be allocated to a breakout session for treatment.

Time budget: 1 TU

### 7.24.1 TEI proposals by Other Groups

Items initiated by other groups that is/has been communicated by LS, where the other group indicate this is TEI18. (Specific other-group-WIs should use the R18 Other Agenda Item below).

Incoming LSs (note: R2-2304609 was intended to be noted at RAN2#121bis-e)

[R2-2304609](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304609_R1-2302201.docx) LS on 1-symbol PRS (R1-2302201; contact: ZTE) RAN1 LS in Rel-18 TEI18 To:RAN2, RAN3 Cc:RAN4

[R2-2304623](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304623_R3-231935.doc) Reply LS on 1-symbol PRS (R3-231935; contact: ZTE) RAN3 LS in Rel-18 TEI18 To:RAN1 Cc:RAN2

1-symbol PRS

[R2-2306079](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306079%20Introduction%20of%201-symbol%20PRS%20in%2038.331%5b1symbol_PRS%5d.docx) Introduction of 1-symbol PRS in 38.331[1symbol\_PRS] ZTE Corporation CR Rel-18 38.331 17.4.0 4014 1 B TEI18 R2-2303498

[R2-2306080](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306080%20Introduction%20of%201-symbol%20PRS%20in%2037.355%5b1symbol_PRS%5d.docx) Introduction of 1-symbol PRS in 37.355[1symbol\_PRS] ZTE Corporation CR Rel-18 37.355 17.4.0 0437 1 B TEI18 R2-2303499

[R2-2306081](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306081%20Introduction%20of%20UE%20capability%20of%201-symbol%20PRS%20in%2037.355%5b1symbol_PRS%5d.docx) Introduction of UE capability of 1-symbol PRS in 37.355[1symbol\_PRS] ZTE Corporation CR Rel-18 37.355 17.4.0 0453 - B TEI18

[R2-2306082](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306082%20Introduction%20of%20UE%20capability%20of%201-symbol%20PRS%20in%2038.331%5b1symbol_PRS%5d.docx) Introduction of UE capability of 1-symbol PRS in 38.331[1symbol\_PRS] ZTE Corporation CR Rel-18 38.331 17.4.0 4128 - B TEI18

[R2-2306083](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306083%20Introduction%20of%20UE%20capability%20of%201-symbol%20PRS%20in%2038.306%5b1symbol_PRS%5d.docx) Introduction of UE capability of 1-symbol PRS in 38.306[1symbol\_PRS] ZTE Corporation CR Rel-18 38.306 17.4.0 0923 - B TEI18

* [AT122][403][POS] 1-symbol PRS CR check (ZTE)

Scope: Check the CRs in R2-2306079 / R2-2306080 / R2-2306081 / R2-2306082 / R2-2306083

Intended outcome: CRs agreeable in principle

Deadline: Wednesday 2023-05-24 2000 KST

### 7.24.2 TEI proposals by RAN2

Items initiated in RAN2.

Tdoc limitation: 1 tdoc, limitation only applicable for non-previously-agreed-to-be-considered TEI proposals.

Emergency cause value for relay

[R2-2304759](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304759%20-%20Discussion%20on%20emergency%20cause%20value%20for%20SL%20Relay.docx) Discussion on emergency cause value for SL Relay OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core, TEI18

GNSS LOS/NLOS

[R2-2304838](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304838.docx) GNSS LOS/NLOS assistance information, stage 3 details and corrections Vodafone, Spirent, Ericsson, Telecom Italia discussion Rel-18

* Revised in R2-2306534

[R2-2306534](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306534.docx) GNSS LOS/NLOS assistance information, stage 3 details and corrections Vodafone, Spirent, Ericsson, Telecom Italia discussion Rel-18

[R2-2305474](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305474.docx) GNSS LOS/NLOS assistance information [GNSS LOS/NLOS] Vodafone, Spirent, Ericsson, Telecom Italia CR Rel-18 37.355 17.4.0 0446 - B TEI18

* Revised in R2-2306537

[R2-2306537](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306537.docx) GNSS LOS/NLOS assistance information [GNSS LOS/NLOS] Vodafone, Spirent, Ericsson, Telecom Italia, Samsung CR Rel-18 37.355 17.4.0 0446 1 B TEI18

[R2-2305481](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305481.docx) GNSS LOS/NLOS posSIB broadcast assistance information [GNSS LOS/NLOS] Vodafone, Spirent, Ericsson, Telecom Italia CR Rel-18 38.331 17.4.0 4109 - B TEI18

* Revised in R2-2306536

[R2-2306536](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306536.docx) GNSS LOS/NLOS posSIB broadcast assistance information [GNSS LOS/NLOS] Vodafone, Spirent, Ericsson, Telecom Italia, Samsung CR Rel-18 38.331 17.4.0 4109 1 B TEI18

[R2-2305490](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305490.docx) GNSS LOS/NLOS posSIB broadcast assistance information [GNSS LOS/NLOS] Vodafone, Spirent, Ericsson, Telecom Italia CR Rel-18 36.331 17.4.0 4931 - B TEI18

* Revised in R2-2306535

[R2-2306535](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306535.docx) GNSS LOS/NLOS posSIB broadcast assistance information [GNSS LOS/NLOS] Vodafone, Spirent, Ericsson, Telecom Italia, Samsung CR Rel-18 36.331 17.4.0 4931 1 B TEI18

* [AT122][404][POS] GNSS LOS/NLOS CR check (Vodafone)

Scope: Check the CRs in R2-2306535 / R2-2306536 / R2-2306537, taking into account the exposition in R2-2306534.

Intended outcome: CRs agreeable in principle

Deadline: Wednesday 2023-05-24 2000 KST

MUSIM cause value for relay

[R2-2304974](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2304974_Discussion%20on%20MUSIM%20paging%20cause%20forwarding.docx) Discussion on MUSIM paging cause forwarding vivo discussion

[R2-2305014](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305014_Paging%20Cause%20forwarding.doc) Paging Cause forwarding Samsung Electronics Co., Ltd discussion Rel-18 TEI18

posSIB reception time

[R2-2305216](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305216.doc) Discussion on how to support posSIB(s) forwarding Xiaomi discussion

Yaw and APC

[R2-2305265](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305265%20-%20Yaw%20and%20APC%20enhancements.docx) Discussion on Yaw and APC enhancements Swift Navigation discussion

* [AT122][405][POS] Yaw and APC in Rel-18 (Swift)

Scope: Check the proposals in R2-2305265 and adapt the TPs into CRs if agreeable.

Intended outcome: Report to CB session in R2-2306673 and potentially CRs agreed in principle

Deadline: Wednesday 2023-05-24 2000 KST

Positioning for remote UEs

[R2-2305850](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305850.docx) Positioning and posSIB forwarding for remote UEs MediaTek Inc., CATT, Huawei, HiSilicon, Qualcomm Incorporated, Xiaomi, Intel Corporation, vivo discussion Rel-18 TEI18

[R2-2305852](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305852.DOCX) Positioning restrictions for UE-to-network remote UEs [PosL2RemoteUE] MediaTek Inc., CATT, Huawei, HiSilicon, Qualcomm Incorporated, Xiaomi, Intel Corporation, vivo, Ericsson CR Rel-18 38.305 17.4.0 0134 1 C TEI18 R2-2304318

[R2-2305854](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305854.DOCX) Support positioning of L2 UE-to-network remote UEs [PosL2RemoteUE] MediaTek Inc., CATT, Huawei, HiSilicon, Qualcomm Incorporated, Xiaomi, Intel Corporation, vivo, Ericsson CR Rel-18 37.355 17.4.0 0444 1 C TEI18 R2-2304319

[R2-2305857](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305857.DOCX) Downlink positioning support and posSIB request for L2 UE-to-network remote UE [PosL2RemoteUE] MediaTek Inc., CATT, Huawei, HiSilicon, Qualcomm Incorporated, Xiaomi, Intel Corporation, vivo, Ericsson CR Rel-18 38.331 17.4.0 4066 1 C TEI18 R2-2304320

[R2-2305859](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305859.DOCX) Capabilities of L2 UE-to-network relay UEs for positioning [PosL2RemoteUE] MediaTek Inc., CATT, Huawei, HiSilicon, Qualcomm Incorporated, Xiaomi, Intel Corporation, vivo, Ericsson CR Rel-18 38.306 17.4.0 0907 1 C TEI18 R2-2304454

[R2-2305865](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305865.docx) Downlink positioning performance results for remote UEs out of coverage MediaTek Inc. discussion Rel-18 TEI18

[R2-2306019](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306019%20Relay.docx) Relay based Positioning posSIB forwarding Ericsson discussion Rel-18

* [AT122][406][POS] Positioning for remote UEs CR check (CATT)

Scope: Check the CRs in R2-2305852 / R2-2305854 / R2-2305857 / R2-2305859 in light of the exposition in R2-2305850 / R2-2305865, and evaluate the proposals in R2-2306019.

Intended outcome: Report to CB session in R2-2306674 and CRs agreeable in principle

Deadline: Wednesday 2023-05-24 2000 KST

Local cartesian coordinates

[R2-2305889](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305889_(local%20coordinates).docx) Support of Local Cartesian Coordinates in LPP Qualcomm Incorporated discussion

[R2-2305891](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2305891_(LPP%20CR%20on%20local%20coordinates)_v01.docx) Support of Local Cartesian Coordinates in LPP [PosLocalCoords] Qualcomm Incorporated CR Rel-18 37.355 17.4.0 0447 - C TEI18

Multiple QoS for positioning

[R2-2306221](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306221%20(7.24.2)%20multiple%20QoS%20handling%20in%20POS.docx) Introduction of ‘multiple QoS’ class in positioning Samsung R&D Institute UK, Ericsson, Huawei, HiSilicon discussion

Relay bit rate recommendation

[R2-2306516](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202305%20-%20RAN2_122,%20Incheon\Extracts\R2-2306516_Considerations%20on%20voice%20and%20video%20support%20for%20Relays.docx) Considerations on voice and video support for Relays Philips International B.V., MediaTek, Vivo, FirstNet, KPN, TNO, Kyocera discussion Rel-18 NR\_SL\_relay-Core R2-2200413

Withdrawn/Not available

R2-2306146 Introduction of ‘multiple QoS’ class in positioning Samsung R&D Institute UK discussion Withdrawn

## 7.25 R18 Other

Specific items may be allocated to a breakout session for treatment.

Impacts from Other RAN WGs and TSGs that has no separate TU budget in RAN2. LS ins for Rel-18 specific WIs/SIs that has no RAN WI.

Time budget: 2 TU

Tdoc Limitation: -

### 7.25.3 Other

RAN3, SA2, SA3, CT1 led items and others, e.g. eNPN

[R2-2305345](C:\\Users\\mtk16923\\Documents\\3GPP Meetings\\202305 - RAN2_122, Incheon\\Extracts\\R2-2305345 Draft CR of new location information type for PRU.docx" \o "C:\Users\mtk16923\Documents\3GPP Meetings\202305 - RAN2_122, Incheon\Extracts\R2-2305345 Draft CR of new location information type for PRU.docx) Draft CR of new location information type for PRU vivo draftCR Rel-18 37.355 17.4.0 5G\_eLCS\_Ph3

[R2-2306024](C:\\Users\\mtk16923\\Documents\\3GPP Meetings\\202305 - RAN2_122, Incheon\\Extracts\\R2-2306024 PRU.docx" \o "C:\Users\mtk16923\Documents\3GPP Meetings\202305 - RAN2_122, Incheon\Extracts\R2-2306024 PRU.docx) On the Positioning Reference Units aspects Ericsson discussion Rel-18