3GPP TSG-RAN WG2 Meeting #123 R2-23xxxxx

Toulouse, France, 21-25 August 2023

Source: Session Chair (MediaTek)

Title: Report from session on positioning and sidelink relay

# 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.

# 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)

### 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.

Incoming LS

[R2-2308268](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308268.docx) LS on SSR orbit and clock correction reference for BDS in 3GPP LPP (contact: Ericsson) RTCM SC 104 LS in Rel-16 NR\_pos-Core To:RAN2

CRs

[R2-2308476](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308476%20BDSSSR.docx) GNSS SSR BDS orbit emphemeris reference clarification to align with RTCM Ericsson CR Rel-16 37.355 16.11.0 0460 - F NR\_pos-Core

[R2-2308477](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308477%20BDSSSR.docx) GNSS SSR BDS orbit emphemeris reference clarification to align with RTCM Ericsson CR Rel-17 37.355 17.5.0 0461 - A NR\_pos-Core

Withdrawn/Not available

R2-2307357 Correction to 38.305 on E-CID Huawei, HiSilicon CR Rel-16 38.305 16.9.0 0137 - F NR\_pos-Core Withdrawn

R2-2307358 Correction to 38.305 on E-CID Huawei, HiSilicon CR Rel-17 38.305 17.5.0 0138 - A NR\_pos-Core Withdrawn

### 5.3.2 RRC corrections

Including impact to 36.331, 38.331, and 38.306.

### 5.3.3 LPP corrections

[R2-2308474](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308474%20GNSSTropo.docx) Correcting GNSS Ionospheric and Troposperic Delay Correction quality representation Ericsson CR Rel-16 37.355 16.11.0 0458 - F NR\_pos-Core

[R2-2308475](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308475%20GNSSTropo.docx) Correcting GNSS Ionospheric and Troposperic Delay Correction quality representation Ericsson CR Rel-17 37.355 17.5.0 0459 - A NR\_pos-Core

[R2-2308688](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308688_Addition%20of%20field%20descriptions%20for%20nr-DL-PRS-ResourceSetID_nr-DL-PRS-ResourceID-R16.docx) Addition of missing field description for nr-DL-PRS-ResourceID/nr-DL-PRS-ResourceSetID Samsung CR Rel-16 37.355 16.11.0 0462 - F NR\_pos-Core

[R2-2308689](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308689_Addition%20of%20field%20descriptions%20for%20nr-DL-PRS-ResourceSetID_nr-DL-PRS-ResourceID-R17.docx) Addition of missing field description for nr-DL-PRS-ResourceID/nr-DL-PRS-ResourceSetID Samsung CR Rel-17 37.355 17.5.0 0463 - A NR\_pos-Core

### 5.3.4 MAC corrections

# 6 NR Rel-17

## 6.2 NR Sidelink relay

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

Tdoc Limitation: 2 tdocs

### 6.2.1 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).

Rapporteur summary

R2-2308953 [Pre123][401][Relay] Summary of AI 6.2.1 on Rel-17 relay control plane (Huawei) Huawei, HiSilicon discussion Rel-17

Other contributions

[R2-2307194](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307194_38.331_CR_Corrections%20to%20processing%20of%20paging%20information%20received%20via%20Relay%20UE.docx) 38.331\_CR\_Corrections to processing of paging information received via Relay UE Samsung Electronics Co., Ltd CR Rel-17 38.331 17.5.0 4177 - F NR\_SL\_relay-Core

[R2-2307239](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5C38331_CR4180_%28REL-17%29_R2-2307239%20-%20Correction%20of%20RemoteUEInformationSidelink%20transmission%20condition.docx) Correction of RemoteUEInformationSidelink transmission condition OPPO CR Rel-17 38.331 17.5.0 4180 - F NR\_SL\_relay-Core

[R2-2307727](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5C38331_CR4209_R2-2307727_Correction%20on%20NR%20SL%20discovery%20transmission.docx) Conditions for RRC connection establishment and resume for NR sidelink discovery Samsung, Huawei, HiSilicon CR Rel-17 38.331 17.5.0 4209 - F NR\_SL\_relay-Core, NR\_SL\_enh-Core

[R2-2307755](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CDocs%5CR2-2307755.zip) Correction on NR Sidelink Relay RRC Philips International B.V. CR Rel-17 38.331 17.5.0 4212 - F NR\_SL\_relay-Core

[R2-2307852](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307852%2038331_Correction_SRAP_configuration.docx) Corrections on SRAP related configurations for SL relay Apple CR Rel-17 38.331 17.5.0 4215 - F NR\_SL\_relay-Core

[R2-2307853](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307853%2038331_Correction_L2_Src_ID.docx) Corrections on the reporting of L2 ID for L2 U2N relay operation Apple CR Rel-17 38.331 17.5.0 4216 - F NR\_SL\_relay-Core

[R2-2307955](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307955_Correction%20on%20CHO%20and%20Path%20Switching%20of%20Remote%20UE.docx) Correction on CHO and Path Switching of Remote UE NEC Corporation CR Rel-17 38.300 17.5.0 0695 - F NR\_SL\_relay-Core

[R2-2308210](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5C38331_CR4235_%28Rel-17%29_R2-2308210%20Miscellaneous%20corrections%20for%20SL%20relay.docx) Miscellaneous corrections for SL relay Huawei, HiSilicon CR Rel-17 38.331 17.5.0 4235 - F NR\_SL\_relay-Core

[R2-2308271](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308271_Corrections%20to%20TS%2038.331%20on%20SL%20relay%20%28re%29selection.docx) Corrections to TS 38.331 on SL relay (re)selection ZTE, CAICT, Sanechips CR Rel-17 38.331 17.5.0 4241 - F NR\_SL\_relay-Core

[R2-2308272](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308272_Corrections%20to%20TS%2038.300%20on%20SL%20relay%20%28re%29selection.docx) Corrections to TS38.300 on SL relay (re)selection ZTE, CAICT, Sanechips CR Rel-17 38.300 17.5.0 0698 - F NR\_SL\_relay-Core

[R2-2308275](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308275_Correction%20to%2038.331%20on%20U2N%20relay%20%28re%29selection.docx) Correction to 38.331 on U2N relay (re)selection vivo CR Rel-17 38.331 17.5.0 4240 - F NR\_SL\_relay-Core

[R2-2308550](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308550%20-%2038.331_CR4261_Rel17_Miscellaneous%20Corrections%20SL%20Relays.docx) Miscellaneous Corrections for SL Relays Ericsson España S.A. CR Rel-17 38.331 17.5.0 4261 - D NR\_SL\_relay-Core

[R2-2308553](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308553%20-%2038.300_CR0703_Rel17_Miscellaneous%20Corrections%20SL%20Relays.docx) Miscellaneous Correction for SL Relays Ericsson CR Rel-17 38.300 17.5.0 0703 - D NR\_SL\_relay-Core

[R2-2308714](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308714%20Corrections%20on%20U2N%20Relay.docx) Corrections on U2N Relay ASUSTeK CR Rel-17 38.331 17.5.0 4281 - F NR\_SL\_relay-Core

### 6.2.2 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).

[R2-2307238](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5C38351_CR0023_%28REL-17%29_R2-2307238%20-%20Correction%20of%20IE%20name%20sl-SRAP-ConfigRemote.docx) Correction of IE name sl-SRAP-ConfigRemote OPPO CR Rel-17 38.351 17.5.0 0023 - F NR\_SL\_relay-Core

[R2-2307756](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CDocs%5CR2-2307756.zip) Correction on SRAP for sidelink relay Philips International B.V. CR Rel-17 38.351 17.5.0 0024 - F NR\_SL\_relay-Core

[R2-2308211](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5C38351_CR0025_%28Rel-17%29_R2-2308211%20Clarification%20on%20the%20BEARER%20ID%20in%20SRAP%20data%20PDU.docx) Clarification on the BEARER ID in SRAP data PDU Huawei, HiSilicon CR Rel-17 38.351 17.5.0 0025 - F NR\_SL\_relay-Core

## 6.4 NR positioning enhancements

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

Tdoc Limitation: 2 tdocs

### 6.4.1 Stage 3 corrections

A single CR per TS (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).

[R2-2307359](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307359%20Correction%20to%20Multi-RTT.docx) Correction to Multi-RTT Huawei, HiSilicon CR Rel-17 37.355 17.5.0 0455 - F NR\_pos\_enh-Core

[R2-2307360](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307360%20Correcton%20to%20UE%20capability%20for%20batch%20reporting.docx) Correction to UE capability for batch reporitng Huawei, HiSilicon CR Rel-17 37.355 17.5.0 0456 - F NR\_pos\_enh-Core

[R2-2307504](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307504_LPP%20CR%20Missing%20error%20cause%20code%20for%20DL%20PRS%20Measurements.docx) Missing error cause code for DL PRS Measurements Fraunhofer IIS, Ericsson CR Rel-17 37.355 17.5.0 0457 - F NR\_pos\_enh-Core

[R2-2308478](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308478%20PeriodicCR.docx) Missing finer periodicities than 1s Ericsson CR Rel-17 37.355 17.5.0 0450 1 F NR\_pos\_enh-Core R2-2306026

[R2-2308479](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308479%20PeriodicD.docx) Missing LPP support for sub 1s location information reporting periodicity Ericsson discussion Rel-17

[R2-2308690](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308690_Addition%20of%20missing%20values%20for%20dl-prs-ResourceSetPeriodicityReq-r17.docx) Addition of missing values for dl-prs-ResourceSetPeriodicityReq-r17 Samsung CR Rel-17 37.355 17.5.0 0464 - F NR\_pos\_enh-Core

### 6.4.2 Stage 2 corrections

A single CR with miscellaneous corrections is encouraged. Small editorial corrections should be sent directly to the CR rapporteur. This agenda item will be handled at lower priority.

[R2-2308759](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308759%20CR_38305_PRU.docx) Correction of PRU overview description Nokia, Nokia Shanghai Bell CR Rel-17 38.305 17.5.0 0139 - F NR\_pos\_enh-Core

# 7 Rel-18

## 7.2 Expanded and improved NR positioning

(NR\_pos\_enh2; leading WG: RAN1; REL-18; WID: RP-231460)

Time budget: 2 TU

Tdoc Limitation: 4 tdocs

### 7.2.1 Organizational

Including incoming LSs and rapporteur inputs.

Incoming LSs with RAN2 in Cc:

R2-2307007 Reply LS on Sidelink positioning procedure (R1-2306208; contact: Xiaomi) RAN1 LS in Rel-18 Ranging\_SL To:SA2 Cc:RAN2

R2-2307031 Reply LS on Authorization and Provisioning for Ranging/SL positioning service (R3-233424; contact: Xiaomi) RAN3 LS in Rel-18 Ranging\_SL, NR\_pos\_enh2 To:SA2 Cc:RAN1, RAN2

[R2-2307052](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307052_S1-231370.docx) Reply LS on the requirement on low power or high accuracy positioning (S1-231370; contact: Huawei) SA1 LS in Rel-18 5G\_eLCS\_Ph3 To:SA2 Cc:RAN1, RAN2

Incoming LS with “take into account” action

[R2-2307004](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307004_R1-2306157.docx) LS reply on the RAT-dependent positioning integrity (R1-2306157; contact: InterDigital) RAN1 LS in Rel-18 NR\_pos\_enh2 To:RAN2 Cc:RAN3

Other incoming LSs and draft replies

[R2-2307010](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307010_R1-2306214.docx) LS to RAN2 on SRS bandwidth aggregation for positioning (R1-2306214; contact: ZTE) RAN1 LS in Rel-18 NR\_pos\_enh2 To:RAN2

[R2-2308139](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308139%20%5Bdraft%5DReply%20LS%20to%20RAN1%20on%20SRS%20bandwidth%20aggregation%20for%20positioning.docx) [draft]Reply LS to RAN1 on SRS bandwidth aggregation for positioning ZTE Corporation LS out Rel-18 NR\_pos\_enh2 To:RAN1

* [AT123][402][POS] LS to RAN1 on SRS bandwidth aggregation (ZTE)

 Scope: Draft a reply to R2-2307010, taking online discussion into account.

 Intended outcome: Approved LS (without CB if possible)

 Deadline: Wednesday 2023-08-23 2000 UTC

[R2-2307032](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307032_R3-233474.docx) Reply LS on SRS Configuration Request (R2-2302278; contact: Huawei) RAN3 LS in Rel-18 NR\_pos\_enh2 To:RAN2 Cc:RAN1

[R2-2307042](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307042_R4-2310166.docx) LS on reporting granularity for timing related positioning measurements (R4-2310166; contact: Huawei) RAN4 LS in Rel-18 NR\_pos\_enh2 To:RAN2, RAN3 Cc:RAN1

[R2-2307126](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307126%20Draft%20reply%20LS%20on%20timing%20measurement%20reporting%20granularity_v01.doc) Draft reply LS on timing measurement reporting granularity Huawei, HiSilicon LS out Rel-18 NR\_pos\_enh2 To:RAN4 Cc:RAN1, RAN3

[R2-2307127](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307127%20Discussion%20on%20measurement%20reporting%20granularity_v01.docx) Discussion on measurement reporting granularity Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

* [AT123][403][POS] LS to RAN4 on timing measurement reporting granularity (Huawei)

 Scope: Draft a reply to R2-2307042, taking online discussion into account.

 Intended outcome: Approved LS (without CB if possible)

 Deadline: Wednesday 2023-08-23 2000 UTC

[R2-2307054](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CDocs%5CR2-2307054.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

[R2-2307056](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307056_S2-2307553.docx) LS on assistance information provided to UE (S2-2307553; contact: Xiaomi) SA2 LS in Rel-18 Ranging\_SL To:RAN2

* [AT123][404][POS] LS(s) to SA2 on sidelink positioning (Xiaomi)

 Scope: Draft a reply (or separate replies) to R2-2307054 and R2-2307056, taking online discussion into account.

 Intended outcome: Approvable LS(s)

 Deadline: Wednesday 2023-08-23 2000 UTC

LS-related documents from non-contact companies

[R2-2308053](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308053%20Discussion%20on%20the%20draft%20reply%20LSs%20to%20SA2%20on%20SL%20Pos.docx) Discussion on the reply LSs to SA2 on SL Positioning OPPO discussion Rel-18 NR\_pos\_enh2

Draft TS

[R2-2307663](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CDocs%5CR2-2307663.zip) TS 38.355 v0.0.4 Intel Corporation draft TS Rel-18 38.355 0.0.4 NR\_pos\_enh2

* [AT123][409][POS] TS 38.355 (Intel)

 Scope: Collect comments on the draft TS in R2-2307663 and produce an endorsable version.

 Intended outcome: Endorsable draft TS

 Deadline: Thursday 2023-08-24 2000 UTC

Running CRs

[R2-2307124](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307124%20Draft%20running%20MAC%20CR%20for%20LPHAP_v02.docx) Running MAC CR for LPHAP Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

[R2-2307125](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307125%20Draft%20running%20MAC%20CR%20for%20sidelink%20positioning_v03.docx) Running MAC CR for Sidelink Positioning Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

* [AT123][405][POS] Rel-18 positioning MAC CRs (Huawei)

 Scope: Collect comments on the CRs in R2-2307124 and R2-2307125 and produce endorsable versions.

 Intended outcome: Endorsable CRs

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2307391](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307391%20LPP%20running%20CR%20for%20RAT-dependent%20integrity.docx) LPP running CR for RAT-dependent integrity CATT draftCR Rel-18 37.355 17.5.0 NR\_pos\_enh2

* [AT123][406][POS] Rel-18 LPP CR on RAT-dependent integrity (CATT)

 Scope: Collect comments on the CR in R2-2307391 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2308385](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308385_%28Running%20Stage%202%20CR%29.docx) Running Stage 2 CR for 'Expanded and improved NR positioning' Qualcomm Incorporated draftCR Rel-18 38.305 17.5.0 B NR\_pos\_enh2

[R2-2308386](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308386_%28Stage%202%20TP%20MT-LR%20MO-LR%29.docx) Stage 2 TP for SL-MO-LR/SL-MT-LR Qualcomm Incorporated discussion

[R2-2308387](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308387_%28Stage%202%20TP%20SLPP%20Transport%20Between%20UE%20and%20LMF%29.docx) Stage 2 TP for SLPP Transport between UE and LMF Qualcomm Incorporated discussion

[R2-2308395](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308395_%28Stage%202%20TP%20SLPP%20Transport%20Between%20UEs%29.docx) Stage 2 TP for SLPP Transport between UEs Qualcomm Incorporated discussion

* [AT123][407][POS] Rel-18 positioning stage 2 CR and TPs (Qualcomm)

 Scope: Collect comments on the CR in R2-2308385 and related TPs in R2-2308386 / R2-2308387 / R2-2308395, and produce an endorsable version of the CR.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2308484](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308484%20RRCRappCR.docx) Rapporteur CR for Positioning RRC Changes Ericsson draftCR Rel-18 38.331 17.5.0 B NR\_pos\_enh2

* [AT123][408][POS] Rel-18 positioning RRC CR (Ericsson)

 Scope: Collect comments on the CR in R2-2308484 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

Rapporteur inputs on spec handling

[R2-2307662](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307662%20SLPP%20considerations.docx) Further considerations on SLPP specification Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2308259](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308259%20Discussion%20on%20R18%20positioning%20UE%20capabilities.doc) Discussion on R18 positioning UE capabilities Xiaomi discussion

* [AT123][410][POS] Rel-18 positioning capabilities (Xiaomi)

 Scope: Discuss the proposals in R2-2308259 and conclude on handling of the Rel-18 capabilities.

 Intended outcome: Report to CB session

 Deadline: Wednesday 2023-08-23 2000 UTC

Other

### 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.

Including report of [Post122][402][POS] SLPP session handling (Intel)

Email discussion summary

[R2-2307660](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307660%20%5BPost122%5D%5B402%5D%5BPOS%5D%20SLPP%20session%20handling.docx) Report of [ 402] SLPP session handling Intel Corporation discussion Rel-18 NR\_pos\_enh2 Late

Agenda item summary (excluding items related to the email discussion)

R2-23xxxxx Summary of AI 7.2.2 Sidelink positioning CATT discussion Rel-18 NR\_pos\_enh2

The following documents will not be individually treated

[R2-2307122](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307122%20Discussion%20on%20higher%20layer%20aspects%20for%20Sidelink%20Positioning_final.docx) Discussion on higher layer aspects for Sidelink Positioning Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

[R2-2307123](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307123%20Discussion%20on%20lower%20layer%20aspects%20for%20SL%20positoining_v06.docx) Discussion on lower layer aspects for Sidelink Positioning Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

[R2-2307185](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307185_Sidelink_Fraunhofer.docx) UE Positioning using Sidelink in OoC Fraunhofer IIS, Fraunhofer HHI discussion

[R2-2307187](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307187_Preconfigured_AD_Sidelink_Fraunhofer_Ericsson.docx) Preconfigured Assistance Data for UE Positioning in Hybrid Uu and PC5 scenarios Fraunhofer IIS, Fraunhofer HHI, Ericsson discussion

[R2-2307232](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307232.docx) Discussion of SLPP / LPP signalling procedures Nokia Netherlands discussion Rel-18

[R2-2307241](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307241.docx) Discussion of session-less and session-based positioning Nokia Netherlands discussion Rel-18

[R2-2307340](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307340.docx) SLPP signalling in UE-only sidelink positioning/ranging procedure MediaTek Inc. discussion Rel-18 NR\_pos\_enh2

[R2-2307341](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307341.docx) Pathological cases of network-based operation for sidelink positioning MediaTek Inc. discussion Rel-18 NR\_pos\_enh2 Revised

[R2-2307392](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307392%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning CATT discussion Rel-18 NR\_pos\_enh2

[R2-2307426](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307426%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2307507](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307507%20Discussion%20on%20SL%20positioning.doc) Discussion on SL positioning Xiaomi discussion Rel-18

[R2-2307661](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307661.docx) Further considerations on sidelink positioning Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2307778](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307778%20%287.2.2%29%20SLPP%20design%20in%20session%20aspects.docx) SLPP design for session aspects Samsung Electronics Romania discussion

[R2-2307823](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307823-SL-POS-procedures-v0.docx) SL positioning procedures Apple discussion NR\_pos\_enh2

[R2-2308052](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308052%20Further%20discussion%20on%20sidelink%20positioning.docx) Further discussion on sidelink positioning OPPO discussion Rel-18 NR\_pos\_enh2

[R2-2308125](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308125%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning Spreadtrum Communications discussion Rel-18

[R2-2308138](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308138%20Discussion%20on%20sidelink%20positioning.docx) Discussion on sidelink positioning ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2308152](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308152_SL_Pos_Res.docx) Considerations on sidelink positioning resources Sony discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2308276](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308276_SLPosDiscussion.docx) Discussion on SL Positioning Lenovo discussion Rel-18

[R2-2308284](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308284%20Bosch_Discussion_on_sidelink_positioning.docx) Discussion on sidelink positioning ROBERT BOSCH GmbH discussion Rel-18

[R2-2308316](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308316%20Considerations%20on%20Sidelink%20positioning.doc) Considerations on Sidelink positioning CMCC discussion Rel-18 NR\_pos\_enh2

[R2-2308384](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308384%20%28R18%20NR%20POS%20A722%20SL%20POS%29.docx) Discussion on sidelink positioning InterDigital, Inc. discussion Rel-18 NR\_pos\_enh2

[R2-2308396](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308396_%28Sidelink%20Positioning%29.docx) Sidelink Positioning Protocol (SLPP) Signaling and Procedures Qualcomm Incorporated discussion

[R2-2308416](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308416.docx) Pathological cases of network-based operation for sidelink positioning MediaTek Inc., CATT discussion Rel-18 NR\_pos\_enh2 R2-2307341

[R2-2308480](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308480%20Sidelink%20positioning.docx) Sidelink positioning Ericsson discussion Rel-18

[R2-2308557](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308557.docx) Discussion of resource allocation aspects Nokia Netherlands discussion

[R2-2308595](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308595%20Discussion%20on%20higher%20layer%20aspects%20for%20sidelink%20positioning.docx) Discussion on higher layer aspects for sidelink positioning LG Electronics Inc. discussion Rel-18

[R2-2308600](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308600%20Discussion%20on%20lower%20layer%20aspects%20for%20sidelink%20positioning.docx) Discussion on lower layer aspects for sidelink positioning LG Electronics Inc. discussion Rel-18

[R2-2308657](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308657%20Discussion%20on%20priority%20value%20for%20SL-PRS.doc) Discussion on priority value for SL-PRS Samsung Electronics Co., Ltd discussion Rel-18 NR\_pos\_enh2

[R2-2308800](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308800-Further%20Discussions%20on%20Sidelink%20Positioning%20and%20Ranging.docx)  Further Discussions on Sidelink Positioning & Ranging CEWiT discussion

[R2-2308884](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308884%20Discussion%20on%20Anchor%20UE%20discovery%20and%20selection%20in%20sidelink%20positioning.docx) Discussion on Anchor UE discovery and selection in sidelink positioning KT Corp. discussion Rel-18 NR\_pos\_enh2

[R2-2308908](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308908_On%20the%20selection%20of%20Anchor%20UEs%20for%20Sidelink%20Positioning.doc) On the selection of Anchor UEs for Sidelink Positioning Philips International B.V. discussion Rel-18 NR\_pos\_enh2

[R2-2308935](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308935%20SL%20pos%20server.docx) On the support of UE-only SL positioning in in-coverage and partial coverage scenarios Philips International B.V. discussion Rel-18 NR\_pos\_enh2

### 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.

[R2-2308397](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308397_%28integrity%29.docx) Integrity of NR Positioning Technologies Qualcomm Incorporated discussion

[R2-2307393](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307393%20Discussion%20on%20RAT-Dependent%20integrity.docx) Discussion on RAT-Dependent integrity CATT discussion Rel-18 NR\_pos\_enh2

[R2-2307427](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307427%20Discussion%20on%20remaining%20issues%20for%20positioning%20integrity.docx) Remaining issues of RAT-dependent integrity vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2307664](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307664%20Integrity.docx) Further considerations on RAT dependent integrity Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2307999](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307999%20Discussion%20on%20RAT-dependent%20integrity.doc) Discussion on RAT-dependent integrity Lenovo discussion Rel-18

[R2-2308050](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308050%20Consideration%20on%20RAT-dependent%20positioning%20integrity.docx) Consideration on RAT-dependent positioning integrity OPPO discussion Rel-18 NR\_pos\_enh2

[R2-2308136](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308136%20Discussion%20on%20RAT-dependent%20methods%20positioning%20integrity.docx) Discussion on RAT-dependent methods positioning integrity ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2308260](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308260%20Discussion%20on%20RAT-dependent%20positioning%20integrity.doc) Discussion on RAT-dependent positioning integrity Xiaomi discussion

[R2-2308482](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308482%20RAT%20dependent%20Integrity.docx) On RAT-dependent positioning Integrity Ericsson discussion Rel-18

[R2-2308616](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308616%20%28R18%20NR%20POS%20A723%20RAT%20dependent%20integrity%29.doc) Discussion on RAT dependent integrity InterDigital, Inc. discussion Rel-18

### 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.

Including report of [Post122][401][POS] SRS configuration and activation in LPHAP (CATT)

Email discussion summary

[R2-2308812](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308812%20Report%20of%20%5BPost122%5D%5B401%5D%5BPOS%5D%20SRS%20configuration%20and%20activation%20in%20LPHAP.docx) Report of [Post122][401][POS] SRS configuration and activation in LPHAP (CATT) CATT discussion Rel-18 NR\_pos\_enh2

Agenda item summary (excluding items related to the email discussion)

R2-23xxxxx Summary for 7.2.4 LPHAP excluding SRS configuration & activation part OPPO discussion Rel-18 NR\_pos\_enh2

The following documents will not be individually treated

[R2-2307121](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307121%20Discussion%20on%20LPHAP_final.docx) Discussion on LPHAP Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

[R2-2307186](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307186_LPHAP_Fraunhofer.docx) Enhancements for supporting LPHAP Fraunhofer IIS, Fraunhofer HHI discussion

[R2-2307394](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307394%20Discussion%20on%20SRS%20configuration%20with%20validity%20area%20and%20alignment%20between%20PRS%20and%20%28e%29DRX.docx) Discussion on SRS configuration with validity area and alignment between PRS and (e)DRX CATT discussion Rel-18 NR\_pos\_enh2

[R2-2307428](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307428_Discussion%20on%20solution%20of%20LPHAP.doc) Discussion on solution of LPHAP vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2307665](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307665%20LPHAP.docx) Further considerations on LPHAP Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2307824](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307824-PRS-DRX-alignment-v1.docx) Alignment between DRX and PRS Apple discussion NR\_pos\_enh2

[R2-2308000](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308000%20Discussion%20on%20low%20power%20high%20accuracy%20positioning.doc) Discussion on low power high accuracy positioning Lenovo discussion Rel-18

[R2-2308051](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308051%20Discussion%20on%20LPHAP%20enhancement.docx) Discussion on LPHAP enhancement OPPO discussion Rel-18 NR\_pos\_enh2

[R2-2308126](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308126%20Discussion%20on%20LPHAP.docx) Discussion on LPHAP Spreadtrum Communications discussion Rel-18

[R2-2308135](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308135%20Discussion%20on%20LPHAP.docx) Discussion on LPHAP ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2308153](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308153LPHAP.docx) Considerations on Low Power High Accuracy Positioning Sony discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2308261](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308261%20Discussion%20on%20LPHA%20positioning.doc) Discussion on LPHA positioning Xiaomi discussion

[R2-2308317](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308317%20Further%20considerations%C2%A0on%C2%A0LPHAP.doc) Further considerations on LPHAP CMCC discussion Rel-18 NR\_pos\_enh2

[R2-2308398](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308398_%28LPHAP%29.docx) Enhancements for LPHAP Qualcomm Incorporated discussion

[R2-2308481](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308481%20LPHAP.docx) Discussion on Low Power High Accuracy Positioning Ericsson discussion Rel-18

[R2-2308618](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308618%20%28R18%20NR%20POS%20A724%20LPHAP%29.doc) Discussion on LPHAP InterDigital, Inc. discussion Rel-18

[R2-2308693](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308693_Discussion%20on%20alignment%20between%20%28e%29DRX%20and%20PRS.docx) Discussion on alignment between (e)DRX and PRS Samsung discussion Rel-18 NR\_pos\_enh2

[R2-2308694](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308694_Discussion%20on%20SRS%20configuration%20in%20RRC_INACTIVE.docx) Discussion on SRS configuration in RRC\_INACTIVE Samsung discussion Rel-18 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.

[R2-2308001](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308001%20Discussion%20on%20RedCap%2C%20carrier%20phase%20positioning%20and%20PRS%2CSRS%20bandwidth%20aggregation.doc) Discussion on RedCap positioning, carrier phase positioning and PRS/SRS bandwidth aggregation Lenovo discussion Rel-18

[R2-2307395](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307395%20Discussion%20on%20carrier%20phase%20positioning%2C%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

[R2-2307429](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307429%20RAN2-related%20issues%20about%20bandwidth%20aggregation.docx) RAN2-related issues about bandwidth aggregation vivo discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2307455](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307455%20Discussion%20on%20RAN1%20led%20positioning%20topics.docx) Discussion on RAN1 led positioning topics Huawei, HiSilicon discussion

[R2-2307666](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307666%20RAN1%20led%20items.docx) Considerations on other RAN1 led items Intel Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2307827](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307827-on-demand-prs-aggregation-v0.docx) On-demand PRS with bandwidth aggregation Apple discussion NR\_pos\_enh2

[R2-2308137](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308137%20Discussion%20on%20BW%20aggregation%20and%20RedCap%20positioning.docx) Discussion on BW aggregation and RedCap positioning ZTE Corporation discussion Rel-18 NR\_pos\_enh2

[R2-2308174](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308174%20RedCap%20Positioning.docx) Discussion on Frequency hopping for Positioning for RedCap Ues Sony discussion Rel-18 FS\_NR\_pos\_enh2

[R2-2308262](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308262%20Discussion%20on%20RedCap%20positioning%2C%20carrier%20phase%20positioning%20and%20bandwidth%20aggregation%20for%20positioning.doc) Discussion on RedCap positioning, carrier phase positioning and bandwidth aggregation for positioning Xiaomi discussion

[R2-2308399](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308399_%28PRS%20Aggregation%29.docx) Configuration Enhancements for DL-PRS Aggregation Qualcomm Incorporated discussion

[R2-2308483](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308483%20RedCap.docx) Discussion based upon RAN1 agreements on CPP, RedCap, Bandwidth aggregation Ericsson discussion Rel-18

[R2-2308619](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308619%20%28R18%20NR%20POS%20A725%20Others%29.doc) Discussion on positioning for RedCap positioning, carrier phase positioning, and bandwidth aggregation for positioning InterDigital, Inc. discussion Rel-18

[R2-2308761](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308761%20Carrier%20Phase%20Positioning.docx) Assessment of impact of carrier phase positioning on higher layer protocols Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_pos\_enh2-Core]

## 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” action

[R2-2307057](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307057_S2-2307707.docx) Reply LS to SA2 on authorization for multi-path Scenario 2 (S2-2307707; contact: LGE) SA2 LS in Rel-18 NR\_SL\_relay\_enh, 5G\_ProSe\_Ph2 To:RAN2 Cc:RAN3

[R2-2307072](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307072_S3-233323.docx) Reply LS on security for L2 UE-to-UE relay (S3-233323; contact: Lenovo) SA3 LS in Rel-18 NR\_SL\_relay\_enh, FS\_5G\_ProSe\_Ph2 To:RAN2

Other incoming LS

[R2-2307055](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307055_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

Running CRs and related documents

[R2-2307235](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5C38351_CRyyyy_%28REL-18%29_R2-2307235_Running%20CR%20of%20TS%2038.351%20for%20SL%20Relay%20enhancement.docx) Running CR of TS 38.351 for SL Relay enhancement OPPO draftCR Rel-18 38.351 17.5.0 B NR\_SL\_relay\_enh-Core

* [AT123][411][Relay] Rel-18 SRAP CR (OPPO)

 Scope: Collect comments on the CR in R2-2307235 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2307546](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307546_Introduction%20of%20NR%20sidelink%20U2U%20relay.docx) Introduction of NR sidelink U2U relay vivo draftCR Rel-18 38.331 17.5.0 B NR\_SL\_relay\_enh-Core

* [AT123][412][Relay] Rel-18 RRC CR on U2U relay (vivo)

 Scope: Collect comments on the CR in R2-2307546 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2307720](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307720.docx) 38.322 running CR for enhanced NR sidelink relay Xiaomi draftCR Rel-18 38.322 17.3.0 B NR\_SL\_relay\_enh-Core

* [AT123][413][Relay] Rel-18 relay RLC CR (Xiaomi)

 Scope: Collect comments on the CR in R2-2307720 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2307854](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307854%20Draft%20running%20CR%2038.321.docx) Draft Running CR 38.321 Apple draftCR Rel-18 38.321 17.5.0 B NR\_SL\_relay\_enh-Core

* [AT123][414][Relay] Rel-18 relay MAC CR (Apple)

 Scope: Collect comments on the CR in R2-2307854 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2307920](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307920_38.300_DraftCR.docx) Draft running CR 38.300 LG Electronics Inc. draftCR Rel-18 38.300 17.5.0 B NR\_SL\_relay\_enh-Core

* [AT123][415][Relay] Rel-18 relay stage 2 CR (LG)

 Scope: Collect comments on the CR in R2-2307920 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2308203](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308203%20RRC%20running%20CR%20for%20Rel-18%20multi-path%20support.docx) RRC running CR for Rel-18 multi-path support Huawei, HiSilicon draftCR Rel-18 38.331 17.5.0 B NR\_SL\_relay\_enh-Core

[R2-2308204](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308204%20Considerations%20on%20Multi-path%20RRC%20running%20CR.docx) Considerations on Multi-path RRC running CR Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

* [AT123][416][Relay] Rel-18 RRC CR on multi-path relay (Huawei)

 Scope: Collect comments on the CR in R2-2308203 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2308559](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308559%20-%2038.304_draftCR%28Rel-18%29_Introduction%20of%20Rel-18%20support%20for%20SL%20Relay%20Enhancements.docx) Introduction of Rel-18 support for SL Relay Enhancements Ericsson España S.A. draftCR Rel-18 38.304 17.5.0 B NR\_SL\_relay\_enh

* [AT123][417][Relay] Rel-18 relay idle mode CR (Ericsson)

 Scope: Collect comments on the CR in R2-2308559 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

[R2-2308687](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308687_38331_CR%234277_Rel-18_SL_relay_service_continuity.docx) Introduction of Rel-18 SL relay service continuity MediaTek, Inc CR Rel-18 38.331 17.5.0 4277 - B NR\_SL\_relay\_enh-Core

* [AT123][418][Relay] Rel-18 RRC CR on relay service continuity (MediaTek)

 Scope: Collect comments on the CR in R2-2308687 and produce an endorsable version.

 Intended outcome: Endorsable CR

 Deadline: Thursday 2023-08-24 2000 UTC

### 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

R2-2308956 Summary of UE-to-UE relay Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

* [AT123][401][Relay] Summary proposals on UE-to-UE relay (Qualcomm)

 Scope: Discuss the proposals in R2-2308956 and progress towards agreements.

 Intended outcome: Report to Wednesday online session in R2-2309101

 Deadline: Tuesday 2023-08-22 2000 UTC

R2-2309101 (Report of [AT123][4101]) Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

The following documents will not be individually treated

[R2-2307233](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307233%20-%20Discussion%20on%20U2U%20Relay.docx) Discussion on U2U relay OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307386](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307386_Discussion%20on%20remaining%20issue%20of%20U2U%20relay.docx) Discussion on remaining issue of U2U relay NEC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307402](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307402%20Discussion%20on%20the%20adaptation%20layer.doc) Discussion on the adaptation layer Fujitsu discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307446](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307446.doc) Discussion on U2U relay Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307547](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307547_Remaining%20issues%20on%20U2U%20discovery%20and%20relay%20%28re%29selection.docx) Remaining issues on U2U discovery and relay (re)selection vivo discussion

[R2-2307548](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307548_%20Discussion%20on%20the%20remaining%20issues%20of%20L2%20U2U%20relaying.docx) Discussion on the remaining issues of L2 U2U relaying vivo discussion

[R2-2307551](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307551%20Disussion%20on%20U2U%20Relay.docx) Discussion on U2U Relay CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307641](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307641.docx) U2U Relay selection reselection, SRAP design Beijing Xiaomi Mobile Software discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307655](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307655_FhG_SL-Relay_ShortID.docx) Discussion on using short ID in U2U relaying Fraunhofer IIS, Fraunhofer HHI discussion Rel-18 NR\_SL\_relay\_enh

[R2-2307716](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307716%20Discussion%20on%20U2U%20relay.docx) Discussion on U2U relay TCL discussion

[R2-2307732](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307732%20QoS%20and%20bearer%20configuration%20for%20L2%20U2U%20relaying.doc) QoS and bearer configuration for L2 U2U relaying Samsung discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307742](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307742-common%20part%20and%20Layer-2%20specific%20part%20on%20U2U%20Relay.docx) Common part and Layer-2 specific part on U2U Relay Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

[R2-2307743](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307743-gNB%20involvement%20on%20U2U%20relay.docx) gNB involvement and capability on U2U relay Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

[R2-2307750](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307750_U2U_relay.docx) Considerations for U2U L2 relay operations Kyocera discussion Rel-18

[R2-2307855](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307855%20Discussion%20on%20U2U%20relay%20issues.doc) Discussion on remaining issues on UE-to-UE Relay Apple discussion Rel-18

[R2-2307932](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307932-Control%20plane%20procedure%20for%20U2U%20relay.docx) Control plane procedure for U2U relay LG Electronics Inc. discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307944](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307944%2BFurther%20discussion%20on%20L2%20U2U%20relay.doc) Further discussion on L2 U2U relay China Telecom discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307989](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307989%20Discussion%20on%20L2%20U2U%20relay%20v1.0.docx) Discussion on L2 U2U relay Lenovo discussion Rel-18

[R2-2308100](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308100_Discussion%20on%20U2U%20Relay%20discovery%20and%20%28re%29selection.doc) Discussion on U2U Relay discovery and (re)selection ZTE, Sanechips discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308101](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308101_Discussion%20on%20U2U%20relay%20L2%20specific%20functionality.doc) Discussion on U2U relay L2-specific functionality ZTE, Sanechips discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308104](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308104%20SRAP%20design%20for%20U2U%20sidelink%20relay_final.doc) SRAP design for U2U Sidelink Relay Samsung discussion

[R2-2308119](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308119%20Discussion%20on%20UE-to-UE%20relay.doc) Discussion on UE-to-UE Relay Spreadtrum Communications discussion Rel-18

[R2-2308160](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308160.doc) UE-to-UE relay (re)selection Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2308161](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308161.docx) Discussion on DRX for Sidelink UE to UE Relay Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2308205](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308205%20Discussion%20on%20UE-to-UE%20relay.doc) Discussion on UE-to-UE relay Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308220](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308220-Remaining_issues_of_UE-to-UE_relay.doc) Remaining issues for UE-to-UE relay Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308321](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308321%20Discussion%20on%20U2U%20relay.docx) Discussion on U2U relay CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308368](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308368%20Considerations%20on%20U2U%20relay%20%28re%29selection%20and%20Local%20ID%20assignment.docx) Considerations on U2U relay (re)selection and Local ID assignment Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_SL\_relay\_enh-Core R2-2305590

[R2-2308380](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308380%20%28R18%20SL%20Relay%20WI_AI792%20U2U%20Relays_Open%29.doc) Open Issues on Discovery, Relay Selection, and SRAP for UE to UE Relays InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308381](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308381%20%28R18%20SL%20Relay%20WI_AI792%20U2U%20Relay_QoS%29.doc) QoS and Configuration for L2 UE-to-UE Relays InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308469](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308469_Discussion_on_Relay_reselection_Discovery.docx) Discussion on Relay (re)selection and Discovery Ericsson España S.A. discussion Rel-18

[R2-2308470](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308470_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

[R2-2308611](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308611-Discussion%20on%20Adaptation%20Layer%20for%20L2%20U2U%20Relay.doc) Discussion on Adaptation Layer for L2 U2U Relay ETRI discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308721](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308721%20Discussion%20on%20E2E%20PC5-RRC%20procedures.docx) Discussion on E2E PC5-RRC procedures ASUSTeK discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308722](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308722%20Discussion%20on%20AS%20layer%20configuration%20for%20L2%20U2U%20Relay.docx) Discussion on AS layer configuration for L2 U2U Relay ASUSTeK 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.

[R2-2307945](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307945_Discussion%20on%20the%20procedure%20for%20intra-gNB%20indirect%20to%20indirect%20path%20switch.docx) Discussion on the procedure for intra-gNB indirect to indirect path switch China Telecom discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307226](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307226.docx) Discussion on service continuity enhancement Xiaomi discussion

[R2-2307281](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307281%20SL%20Relay%20Service%20Continuity.docx) SL Relay service continuity considerations Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307549](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307549_Remaining%20issues%20on%20service%20continuity%20enhancement%20for%20L2%20U2N%20relay.docx) Remaining issues on service continuity enhancement for L2 U2N relay vivo discussion

[R2-2307552](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307552%20Further%20Consideration%20on%20Service%20Continuity%20Enhancements.docx) Further Consideration on Service Continuity Enhancements CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307733](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307733%20Discussion%20on%20measurement%20quantity%20configuration.doc) Discussion on measurement quantity configuration Samsung discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307744](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307744-Service%20continuity.docx) Proposal on additional enhancements for service continuity Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

[R2-2307856](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307856%20path%20switching%20to%20IDLE%20or%20INACTIVE%20relay%20UE.doc) Discussion on path switching to IDLE/INACTIVE relay Apple discussion Rel-18

[R2-2307940](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307940_Discussion%20on%20Remaining%20Issues%20of%20Service%20Continuity.docx) Discussion on Remaining Issues of Service Continuity NEC Corporation discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307990](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307990%20Discussion%20on%20enhanced%20path%20switching%20v2.0.docx) Discussion on enhanced path switching Lenovo discussion Rel-18

[R2-2308102](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308102_Further%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

[R2-2308162](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308162.doc) Service continuity enhancements for UE sidelink relay Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2308221](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308221-Remaining_issues_for_U2N_path_switching.doc) Remaining issues for U2N path switching Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308322](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308322%20Discussion%20on%20service%20continuity.docx) Discussion on service continuity CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308471](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308471_Discussion_on_Inter_gNB_Service_Continuity.docx) Discussion on Inter-gNB Service Continuity Ericsson España S.A. discussion Rel-18

[R2-2308584](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308584%20Discussion%20on%20service%20continuity.docx) Discussion on Service Continuity Huawei, HiSilicon 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).

Including report of [Post122][403][Relay] Procedures for multi-path relay (LG)

Email discussion summary

[R2-2307973](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307973%20Report%20of%20%5BPost122%5D%5B403%5D%5BRelay%5D.doc) Report of [AT121bis-e][419][Relay] Remaining high-priority proposals on multi-path (LG) LG Electronics France report Rel-18 NR\_SL\_relay\_enh

* Revised in R2-2308950 (title correction)

R2-2308950 Report of [Post122][403][Relay] Procedures for multi-path relay (LG) LG Electronics France report Rel-18 NR\_SL\_relay\_enh

Agenda item summary (excluding items related to the email discussion)

[R2-2308949](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308949%20%5BPre123%5D%5B405%5D%5BRelay%5D%20Summary%20of%20AI%207.9.4%20on%20Multi-path%20relay.docx) Offline 402 on A.I 7.9.4 Multi-path relaying Nokia discussion NR\_SL\_relay\_enh-Core

The following documents will not be individually treated

[R2-2307093](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307093%20-%20Discussion%20on%20multi-path%20Relay_V02.docx) Discussion on multi-path SL relay OPPO discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307182](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307182%20Discussion%20on%20Multi-path%20relaying.docx) Discussion on Multi-path relaying Lenovo discussion NR\_SL\_relay\_enh-Core

[R2-2307227](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307227.docx) Discussion on multi-path Xiaomi discussion

[R2-2307363](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307363%20-%20Discussion%20on%20non-split%20SRB.docx) Discussion on non-split SRB OPPO, Samsung, China Telecom, Huawei, HiSilicon, Ericsson, vivo, CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307387](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307387%20Discussion%20on%20remaining%20CP%20issue%20of%20U2N%20multi-path%20relay.docx) Discussion on remaining issue of multi-path relay NEC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307403](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307403%20Discussions%20on%20Multi-path.docx) Discussions on multi-path Fujitsu discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307550](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307550_Remaining%20Issues%20for%20Multi-path%20Scenario%201%202.docx) Remaining Issues for Multi-path Scenario 1 2 vivo discussion

[R2-2307553](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307553%20Discussion%20on%20Multi-path.docx) Discussion on Multi-path CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307656](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307656_FhG_SL-Relay_Throughput_Enhancements.docx) Throughput Enhancement in U2N Relaying Fraunhofer IIS, Fraunhofer HHI discussion Rel-18 NR\_SL\_relay\_enh

[R2-2307719](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307719_Discussion%20on%20multi-path%20scenario%201_III.docx) Discussion on multi-path scenario 1 III discussion NR\_SL\_relay\_enh-Core

[R2-2307745](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307745-open%20issues%20for%20MP%20relay.docx) Open issues on multi-path relay for scenario 1 and scenario 2 Qualcomm Incorporated discussion NR\_SL\_relay\_enh-Core

[R2-2307751](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307751_multipath_relay.docx) Considerations for multipath relay operations for Scenario 1 Kyocera discussion Rel-18

[R2-2307857](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307857%20Discussion%20on%20Multi-path.doc) Discussion on Multi-path Relay Apple discussion Rel-18

[R2-2307941](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307941_Discussion%20on%20UP%20Issues%20of%20Multi-path%20Relaying.docx) Discussion on UP Issues of Multi-path relay NEC Corporation discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307946](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307946%20Discussion%20on%20remaining%20issues%20of%20multi-path%20relaying%20in%20scenario%201.docx) Discussion on remaining issues of multi-path relaying in Scenario 1 China Telecom discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307947](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307947%20Discussion%20on%20remaining%20issues%20of%20multi-path%20relaying%20in%20scenario%202.docx) Discussion on remaining issues of multi-path relaying in Scenario 2 China Telecom discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307991](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307991%20Procedure%20for%20second%20path%20addition%20v1.0.docx) Procedure for second path addition Lenovo discussion Rel-18

[R2-2308103](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308103%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

[R2-2308120](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308120%20Discussion%20on%20multi-path%20relaying.doc) Discussion on multi-path relaying Spreadtrum Communications discussion Rel-18

[R2-2308163](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308163.doc) Multi-path relaying discussion Sony discussion Rel-18 NR\_SL\_relay\_enh

[R2-2308206](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308206%20Remaining%20issues%20on%20multi-path%20operation.docx) Remaining issues on multi-path operation Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308222](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308222-Remaining_issues_for_multi-path_relay.doc) Remaining issues for multi-path relay Sharp discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308224](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308224_SLRelay_v1.2.docx) Discussion on remaining issues on multiple path for sidelink relay Samsung discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308323](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308323%20Discussion%20on%20multi-path%20scenario%201.docx) Discussion on multi-path scenario 1 CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308324](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308324%20Considerations%20on%20multi-path%20scenario%202.docx) Considerations on multi-path scenario 2 CMCC discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308382](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308382%20%28R18%20SL%20Relay%20WI_AI794%20MultipathAspects_UP%29.doc) User Plane Aspects for Multipath InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308383](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308383%20%28R18%20SL%20Relay%20WI_AI794%20MultipathAspects_CP%29.doc) Control Plane Aspects for Multipath InterDigital discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308472](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308472_Discussion_on_multipath%20relays.docx) Discussion on Multipath Relays Ericsson España S.A. discussion Rel-18

[R2-2308723](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308723%20BSR%20reporting%20for%20Multi-path%20Scenario%202.docx) BSR reporting for Multi-path Scenario 2 ASUSTeK discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308724](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308724%20Discussion%20on%20duplicate%20PDCP%20PDU%20discarding%20for%20Multi-path%20transmission%20Scenario%201.docx) Discussion on duplicate PDCP PDU discarding for Multi-path transmission Scenario 1 ASUSTeK discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308749](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308749%20Multipath%20SL%20relay.docx) On Remaining issues on multipath SL relay Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay\_enh-Core

### 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.

[R2-2307228](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307228.docx) Discussion on SL DRX in U2N relay Xiaomi discussion

[R2-2307234](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307234%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

[R2-2307554](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307554%20Discussion%20on%20DRX%20for%20L2%20U2N%20Relay.docx) Discussion on DRX for L2 U2N Relay CATT discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2307858](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307858%20Discussion%20on%20SL-DRX.doc) Discussion on SL DRX for L2 UE-to-NW relay Apple discussion Rel-18 R2-2305065

[R2-2308207](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308207%20Discussion%20on%20sidelink%20DRX%20for%20L2%20U2N%20relay.doc) Discussion on sidelink DRX for L2 U2N relay Huawei, HiSilicon discussion Rel-18 NR\_SL\_relay\_enh-Core

[R2-2308369](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308369%20Considerations%20on%20paging%20and%20DRX%20for%20sidelink%20relay.docx) Considerations on DRX and paging for sidelink relay Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_SL\_relay\_enh-Core R2-2305592

## 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).

[R2-2307009](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307009_R1-2306212.doc) LS on 1-symbol PRS (R1-2306212; contact: ZTE) RAN1 LS in Rel-18 TEI18 To:RAN2 Cc:RAN3, RAN4

[R2-2308140](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308140%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 17.5.0 4014 3 B TEI18 R2-2306793

[R2-2308141](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308141%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 17.5.0 0437 3 B TEI18 R2-2306794

[R2-2308142](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308142%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 17.5.0 0453 2 B TEI18 R2-2306795

[R2-2308143](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308143%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 17.5.0 4128 2 B TEI18 R2-2306796

[R2-2308144](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308144%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 17.5.0 0923 2 B TEI18 R2-2306797

### 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.

Relay: paging cause forwarding [previously seen]

[R2-2307176](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307176_Paging%20Cause%20forwarding.doc) Paging Cause forwarding Samsung Electronics Co., Ltd discussion Rel-18 TEI18

[R2-2307694](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307694_Discussion%20on%20MUSIM%20paging%20cause%20forwarding.docx) Discussion on MUSIM paging cause forwarding vivo discussion Rel-18

Relay: emergency cause value [previously seen]

[R2-2307237](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307237%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

Relay: voice/video support [previously seen]

[R2-2308932](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308932_Considerations%20on%20voice%20and%20video%20support%20for%20Relays.docx) Considerations on voice and video support for Relays Philips International B.V., FirstNet, InterDigital, KPN, TNO, discussion Rel-18 R2-2306516

Positioning: multiple QoS [previously seen]

[R2-2307342](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307342.docx) Multiple QoS for positioning MediaTek Inc. discussion Rel-18 TEI18

[R2-2308830](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308830%20%287.24.2%29%20multiple%20QoS%20handling%20in%20POS%20TEI%2018.docx) Introduction of ‘multiple QoS’ class in positioning Samsung Electronics Romania discussion

Positioning: SSR PCV residuals [previously seen]

[R2-2307757](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2307757.docx) Support for SSR Satellite PCV Residuals Swift Navigation discussion

Positioning: NavIC enhancements [new]

[R2-2308193](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308193.docx) NavIC L5 A-GNSS support updates to RRC protocol specification Reliance Jio CR Rel-18 38.331 17.5.0 4234 - F TEI18

Positioning/relay: positioning for remote UEs [previously seen]

[R2-2308485](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308485%20RelPos.docx) Relay based Positioning posSIB forwarding Ericsson, Deutsche Telekom, AT&T discussion Rel-18

[R2-2308486](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308486%20RRC%20CR.docx) Information on posSIBs relaying to remote UE [PosL2RemoteUE] Ericsson, Deutsche Telekom, AT&T CR Rel-18 38.331 17.5.0 4254 - B TEI18

[R2-2308487](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308487%20NRPPaForInfo.docx) Information on posSIBs relaying to remote UE Ericsson, Deutsche Telekom, AT&T draftCR Rel-18 38.455 17.5.0 B TEI18

[R2-2308695](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308695_Discussion%20on%20positioning%20for%20L2%20U2N%20remote%20UE.docx) Discussion on positioning support for L2 U2N remote UE Samsung discussion Rel-18 TEI18

Positioning: BT AoA/AoD [new]

[R2-2308489](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308489%20Bluetooth.docx) Adding support for Bluetooth AoA/AoD Ericsson, AT&T, Polaris Wireless, u-blox discussion Rel-18

* Revised in R2-2308955

[R2-2308955](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308955%20Bluetooth.docx) Adding support for Bluetooth AoA/AoD Ericsson, AT&T, Polaris Wireless, u-blox, T-Mobile discussion Rel-18

## 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, Slicing.

[R2-2308400](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308400_%28PRU%20in%20LPP%29.docx) On Positioning Reference Unit support in LPP Qualcomm Incorporated discussion

[R2-2308488](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202308%20-%20RAN2_123%2C%20Toulouse%5CExtracts%5CR2-2308488%20PRU.docx) On the Positioning Reference Units aspects Ericsson, vivo discussion Rel-18

* [AT123][419][POS] Location information type for PRUs (Ericsson)

 Scope: Discuss the proposals in R2-2308400 and R2-2308488, gather company views, and work towards a conclusion.

 Intended outcome: Report to CB session

 Deadline: Wednesday 2023-08-23 2000 UTC