3GPP TSG-RAN WG2 Meeting #116bis-e R2-22xxxxx

Online, 17-25 January 2022

Source: Session Chair (MediaTek)

Title: Report from session on positioning and sidelink relay

# Status of At-Meeting Email Discussions

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

* [AT116bis-e][600][POS][Relay] Organisational Nathan – Positioning/Relay (MediaTek)

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

Intended outcome: Well-informed participants

Deadline: Tuesday 2022-01-25 1800 UTC

* [AT116bis-e][606][Relay] CT1 LS on discovery (CATT)

Scope: Discuss the LS in R2-2200062, determine any RAN2 spec impact, and draft a reply.

Intended outcome: Approvable LS and report to Tuesday CB session on spec impact

Deadline: Monday 2022-01-24 1800 UTC

* [AT116bis-e][607][Relay] Relay UE capabilities (Qualcomm)

Scope: Start discussion of UE capabilities for relaying, with R2-2200178 as an initial input, and attempt to conclude on a baseline set of capabilities for a draft CR to 38.306.

Intended outcome: Report to Tuesday CB session

Deadline: Monday 2022-01-24 1800 UTC

* [AT116bis-e][608][Relay] RAN sharing (Huawei)

Scope: Discuss the issue of RAN sharing for relays, taking into account the related parts of contributions from AI 8.7.2.1. Conclude on what will be supported and analyse spec impact (conclusions to be taken into account by rapporteurs of affected running CRs).

Intended outcome: Report to Tuesday CB session

Deadline: Monday 2022-01-24 1800 UTC

* [AT116bis-e][609][Relay] Open issues on discovery (InterDigital)

Scope: Start discussion of the inputs on discovery from AI 8.7.3.1 with focus on the open issues identified by the rapporteur in R2-2200365, and converge where possible.

Intended outcome: Report to Thursday online session

Deadline: Wednesday 2022-01-19 1800 UTC

* [AT116bis-e][610][POS] Positioning UE capabilities (Intel)

Scope: Start discussion of UE capabilities for positioning, with R2-2200284 as an initial input, and attempt to conclude on a baseline set of capabilities to be reflected in 38.331/38.306 and 37.355.

Intended outcome: Report to Monday CB session

Deadline: Friday 2022-01-21 1600 UTC

* [AT116bis-e][611][POS] GNSS integrity (Swift)

Scope: Start discussion of the proposals from R2-2200012 to determine agreeability and resulting spec impact.

Intended outcome: Report to Wednesday online session (including revision of R2-2200012 if needed)

Deadline: Tuesday 2022-01-18 2200 UTC

* [AT116bis-e][612][POS] Positioning accuracy enhancements (Apple)

Scope: Discuss the contributions in AI 8.11.7 on accuracy enhancements (excluding PRU topics). Determine agreeable RAN2 spec impact from RAN1 conclusions and identify any issues requiring further RAN2 discussion.

Intended outcome: Report to Monday CB session

Deadline: Friday 2022-01-21 1600 UTC

* [AT116bis-e][613][POS] BDS and NavIC CRs (CATT)

Scope: Review the draft CRs in R2-2200298/R2-2201070/R2-2200433, collect any comments, and revise the CRs if needed.

Intended outcome: Endorsed draft CRs (without CB)

Deadline: Friday 2022-01-21 1600 UTC

* [AT116bis-e][614][POS] PRUs (Huawei)

Scope: Discuss the contributions on PRUs in AIs 8.11.7/8.11.8 and the related LSs in R2-2200139/R2-2200140, determine agreeable way forward, and analyse RAN2 spec impact. Draft a reply LS to SA2 if needed.

Intended outcome: Report to Monday CB session, and approvable LS if one is needed

Deadline: Friday 2022-01-21 1600 UTC

* [AT116bis-e][615][Relay] Support of idle/inactive relay UE in path switch (Intel)

Scope: Discuss and attempt to converge on the possible support of a relay UE in RRC\_IDLE or RRC\_INACTIVE during direct-to-indirect path switch.

Intended outcome: Report to online session

Deadline: Thursday 2022-01-20 1600 UTC

# 8 Rel-17 NR Work Items

## 8.7 NR Sidelink relay

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

Time budget: 2 TU

Tdoc Limitation: 6 tdocs

Email max expectation: 7 threads

### 8.7.1 Organizational

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

Work plan and open issues, for information

[R2-2200038](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200038%20-%20Work%20planning%20for%20R17%20SL%20relay.docx) Work planning for R17 SL relay OPPO, CMCC Work Plan Rel-17 NR\_SL\_relay-Core

[R2-2200365](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200365%20-%20Remaining%20open%20issues%20for%20R17%20SL%20relay.docx) Remaining open issues for R17 SL relay OPPO discussion Rel-17 NR\_SL\_relay-Core

Incoming LS and draft reply

[R2-2200062](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Docs\R2-2200062.zip) LS on the indication of discovery message and PC5-S signalling to ProSe layer (C1-217167; contact: CATT) CT1 LS in Rel-17 5G\_ProSe To:RAN2 Cc:SA2

[R2-2200165](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200165.docx) Indication of Discovery Message and PC5-S Signalling to ProSe Layer CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2200366](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200366%20-%20Discussion%20on%20C1-217167.docx) Discussion on C1-217167 OPPO discussion Rel-17 NR\_SL\_relay-Core

UE capability

[R2-2200178](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200178%20-%20Initial%20consideration%20on%20UE%20capability%20of%20sidelink%20relay.doc) Initial consideration on UE capability of sidelink relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

Running CRs

[R2-2200364](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Docs\R2-2200364.zip) Running CR for TS 38.351 OPPO draft TS Rel-17 38.351 0.2.0 NR\_SL\_relay-Core

[R2-2200658](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200658%20Running%20CR%20of%2038.322%20for%20SL%20relay.docx) Running CR of 38.322 for SL Relay Samsung draftCR Rel-17 38.322 16.2.0 B NR\_SL\_relay-Core

[R2-2200659](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200659%20Running%20CR%20of%2038.323%20for%20SL%20relay.docx) Running CR of 38.323 for SL Relay Samsung draftCR Rel-17 38.323 16.6.0 B NR\_SL\_relay-Core

[R2-2200789](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200789%20Stage%202%20Running%20CR%20on%20Introduction%20of%20R17%20SL%20Relay.docx) Stage 2 Running CR on Introduction of R17 SL Relay MediaTek Inc. draftCR Rel-17 38.300 16.8.0 B NR\_SL\_relay-Core

[R2-2201160](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201160-%20Running%20CR%20of%2038.304%20for%20SL%20relay.docx) Running CR of 38.304 for SL relay Ericsson draftCR Rel-17 38.304 16.7.0 B NR\_SL\_relay-Core

[R2-2201507](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201507%20RRC%20running%20CR%20for%20SL%20relay.docx) RRC running CR for SL relay Huawei, HiSilicon draftCR Rel-17 38.331 16.7.0 B NR\_SL\_relay-Core R2-2111490

[R2-2201508](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201508%20Stage3%20open%20issues%20in%20SL%20relay%20RRC%20running%20CR.docx) Stage3 open issues in RRC running CR Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

Comments on running CRs (to be considered by rapporteurs)

[R2-2200944](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200944%20PCR-stage2-corrections.docx) Stage 2 corrections for SL Relay Nokia, Nokia Shanghai Bell, Ericsson draftCR Rel-17 38.300 16.8.0 NR\_SL\_relay-Core

[R2-2200945](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200945%20PCR-RRC-corrections.docx) RRC corrections for SL Relay Nokia, Nokia Shanghai Bell, Ericsson draftCR Rel-17 38.331 16.7.0 NR\_SL\_relay-Core

### 8.7.2 L2 relay specific topics

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

#### 8.7.2.1 Control plane procedures

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

Summary document

[R2-2201407](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201407%20-%20Summary%20of%20AI%208.7.2.1_V3.0.docx) Summary of AI 8.7.2.1 on CP procedure OPPO discussion Rel-17 NR\_SL\_relay-Core Late

WA confirmation joint proposal

[R2-2200367](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200367%20-%20Remaining%20WA%20for%20R17%20SL%20Relay_V4.1.docx) Remaining WA for R17 SL Relay OPPO, Qualcomm Incorporated, Samsung, Intel Corporation, Apple, Huawei, HiSilicon, MediaTek Inc., Xiaomi, Nokia, Nokia Shanghai Bell, Ericsson discussion Rel-17 NR\_SL\_relay-Core

The following documents will not be individually treated

[R2-2200166](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200166.docx) Control Plane Procedures of L2 Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2200172](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200172%20-%20Remaining%20issues%20on%20RRC%20connection%20management%20of%20L2%20U2N%20relay.doc) Remaining issues on RRC connection management of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2200173](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200173%20-%20Remaining%20issues%20on%20paging%20and%20SIB%20forwarding%20in%20L2%20U2N%20relay.doc) Remaining issues on paging and SIB forwarding in L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2200226](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200226_SL_CP_Intel.docx) Leftover issues of Control plane procedures for L2 U2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2200372](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200372-%20Left%20issues%20on%20Control%20Plane%20Aspects%20for%20L2%20Relay.docx) Left Issues on Control Plane Aspects for L2 Relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2200410](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200410%20Monitoring%20Paging%20by%20a%20U2N%20Relay.doc) Monitoring Paging by a U2N Relay Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2200412](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200412%20SI%20acquisition%20by%20a%20remote%20UE.doc) SI acquisition by a remote UE Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2200471](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200471_%20Open%20issues%20on%20L2%20Control%20Plane%20Procedures.docx) Open issues on L2 Control Plane Procedures vivo discussion

[R2-2200512](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200512%20Discussion%20on%20RRC%20reestablishment%20related%20parameters%20for%20L2%20sidelink%20relay%20v1%20CTC.docx) Discussion on RRC reestablishment related parameters for L2 sidelink relay China Telecom discussion Rel-17 NR\_SL\_relay-Core

[R2-2200551](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200551%20Remaining%20issues%20for%20Control%20plane.docx) Remaining issues for Control plane MediaTek Inc. discussion Rel-17

[R2-2200552](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200552%20RAN%20sharing.docx) RAN sharing MediaTek Inc., CATT, OPPO, Qualcomm Incorporated, ZTE, Huawei, HiSilicon, Apple, InterDigital discussion Rel-17

[R2-2200625](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200625.doc) Left issues on control plane procedures for L2 U2N relay Spreadtrum Communications discussion Rel-17

[R2-2200653](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200653%20Remaining%20issues%20for%20paging%20and%20SI%20delivery.doc) Remaining issues for paging and SI delivery Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2200740](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200740%20Discussion%20on%20sidelink%20RLC%20bearer%20management%20for%20L2%20U2N%20relay.docx) Discussion on sidelink RLC bearer management for L2 U2N relay ASUSTeK discussion Rel-17 38.331 NR\_SL\_relay-Core

[R2-2200741](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200741%20Discussion%20on%20missing%20procedural%20text%20for%20applying%20C-RNTI%20of%20Remote%20UE.docx) Discussion on missing procedural text for applying C-RNTI of Remote UE ASUSTeK discussion Rel-17 38.331 NR\_SL\_relay-Core

[R2-2200742](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200742%20Discussion%20on%20missing%20procedural%20text%20for%20Relay%20UE%20to%20apply%20SL-RLC0%20configuration.docx) Discussion on missing procedural text for Relay UE to apply SL-RLC0 configuration ASUSTeK discussion Rel-17 38.331 NR\_SL\_relay-Core

[R2-2200743](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200743%20Reflecting%20Stage%202%20agreement%20on%20sidelink%20resource%20allocation%20mode%20for%20U2N%20relay.docx) Reflecting Stage 2 agreement on sidelink resource allocation mode for U2N relay ASUSTeK discussion Rel-17 38.331 NR\_SL\_relay-Core

[R2-2200776](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200776%20Considerations%20on%20CP%20issues%20v1.0.doc) Considerations on CP issues Lenovo, Motorola Mobility discussion Rel-17

[R2-2200784](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200784%20Further%20Issues%20on%20Paging%20in%20NR%20SL%20Relay.docx) Further Issues on Paging in NR Sidelink Relay Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2200794](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200794%20Discussion%20on%20establishment%20cause%20of%20relay%20UE.doc) Discussion on establishment cause of relay UE Xiaomi, Lenovo, Motorola Mobility, Apple discussion

[R2-2200795](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200795%20Relay%20Connection%20control.doc) Discussion on connection control Xiaomi discussion

[R2-2200796](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200796%20Relay%20Discussion%20on%20SI%20and%20short%20message%20delivery.doc) Discusson on SI delivery Xiaomi discussion

[R2-2200855](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200855%20Control%20plane%20procedure.docx) Control plane procedure CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2200908](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200908.doc) Area specific SI issue in L2 relay Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2200946](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200946%20RAN_Sharing.docx) Discussion on RAN sharing with L2 U2N relays Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2201136](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201136%20Discussion%20on%20control%20plane%20procedures%20for%20L2%20relay.doc) Discussion on remaining issues on control plane procedures Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2201144](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201144%20(R17%20SL%20Relay%20SI_AI8721%20SI%20and%20Paging).doc) Remaining Aspects of Paging and System Information for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2201145](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201145%20(R17%20SL%20Relay%20SI_AI8721%20ConnEst%20Procedure).doc) Open Issues on Connection Establishment for UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2201146](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201146%20(R17%20SL%20Relay%20SI_AI8721%20IDLE_Mobility).doc) IDLE/INACTIVE Remote UE Behaviour during Remote and Relay UE Mobility InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2201158](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201158-%20Remaining%20issues%20on%20control%20plane%20for%20L2%20sidelink%20relay.docx) Remaining issues on control plane for L2 sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2201218](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Docs\R2-2201218.zip) Consideration on the remain issues for control plane procedures LG Electronics France discussion Rel-17

[R2-2201294](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201294_SL%20Relay%20Access%20Control_Intel.docx) Access control support for U2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2201345](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201345%20Consideration%20on%20the%20control%20plane%20procedure%20of%20SL%20relay.doc) Consideration on the control plane procedure of SL relay ZTE, Sanechips discussion Rel-17

[R2-2201509](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201509%20SI%20forwarding%20and%20paging%20for%20L2%20sidelink%20relay.docx) SI forwarding and paging for L2 sidelink relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2201510](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201510%20RRC%20connection%20management%20for%20L2%20sidelink%20relay.docx) RRC connection management for L2 sidelink relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.2.2 Service continuity

Service continuity between Uu and relay paths, limited to intra-gNB cases.

Including outcome of [Post116-e][604][Relay] Remaining issues on service continuity (Xiaomi)

Email discussion summary

[R2-2200009](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200009%20-%20Summary%20of%20%5bPost116-e%5d%5b604%5d%5bRelay%5d%20Remaining%20issues%20on%20service%20continuity%20(Xiaomi).docx) Summary of [Post116-e][604][Relay] Remaining issues on service continuity (Xiaomi) Xiaomi discussion

The following documents will not be individually treated

[R2-2200167](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200167.docx) Leftover Issues on Service Continuity for L2 U2N Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2200174](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200174%20-Remaining%20issues%20on%20service%20continuity%20of%20L2%20U2N%20relay.doc) Remaining issues on service continuity of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2200227](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200227_SL_ServiceContinuity_Intel.docx) Remaining issues for service continuity in L2 U2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2200333](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200333%20Remaining%20issues%20for%20service%20continuity.docx) Remaining issues for service continuity MediaTek Inc. discussion Rel-17

[R2-2200402](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200402_Further%20discussions%20on%20open%20issues%20of%20path%20switch.docx) Further discussions on open issues of path switch NEC Corporation discussion Rel-17

[R2-2200472](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200472%20Remaining%20issues%20on%20service%20continuity%20in%20L2%20U2N%20relay.docx) Remaining issues on service continuity in L2 U2N relay vivo discussion

[R2-2200488](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200488%20Discussion%20on%20remaining%20issue%20of%20service%20continuity.docx) Discussion on remaining issue of service continuity OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2200513](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200513_Discussion%20on%20service%20continuity%20for%20L2%20UE-to-Network%20relay.docx) Discussion on service continuity for L2 UE-to-Network relay China Telecom discussion Rel-17 NR\_SL\_relay-Core

[R2-2200654](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200654%20Open%20issues%20for%20service%20continuity.doc) Open issues for service continuity Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2200744](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200744%20Local%20remote%20UE%20ID%20allocation%20for%20direct%20to%20indirect%20path%20switching.docx) Local remote UE ID allocation for direct to indirect path switching ASUSTeK discussion Rel-17 NR\_SL\_relay-Core

[R2-2200745](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200745%20Multiple%20PDU%20sessions%20handling%20during%20direct%20to%20indirect%20path%20switching.docx) Multiple PDU sessions handling during direct to indirect path switching ASUSTeK discussion Rel-17 NR\_SL\_relay-Core

[R2-2200777](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200777%20Path%20switching%20in%20L2%20U2N%20relay%20v1.0.doc) Path switching in L2 U2N relay case Lenovo, Motorola Mobility discussion Rel-17

[R2-2200793](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200793%20Relay%20Discussion%20on%20service%20continuity.doc) Discussion on service continuity Xiaomi discussion

[R2-2200909](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200909.doc) Service continuity open issues in L2 NR sidelink relay Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2201056](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201056_service%20cont.doc) Remaining issues for Service Continuity in L2 relay Kyocera discussion

[R2-2201137](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201137%20Discussion%20on%20service%20continuity.doc) Discussion on remaining issues on service continuity Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2201147](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201147%20(R17%20SL%20Relay%20SI_AI8722%20Service_Continuity).doc) Remaining Issues on Service Continuity for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2201159](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201159-%20Remaining%20Issues%20on%20service%20continuity%20for%20L2%20sidelink%20relay.docx) Remaining Issues on Service Continuity for L2 Sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2201246](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201246%20Remaining%20issues%20on%20direct-to-indirect%20path%20switching.docx) Remaining issues on direct-to-indirect path switching Sharp discussion

[R2-2201346](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201346%20Discussion%20on%20remaining%20issues%20on%20service%20continuity.doc) Discussion on remaining issues on service continuity ZTE, Sanechips discussion Rel-17

[R2-2201444](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Docs\R2-2201444.zip) Service continuity in direct-to-indirect path switch LG Electronics France discussion Rel-17

[R2-2201462](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201462%20Support%20of%20idle%20mode%20mobility%20for%20remote-UE%20in%20SL%20U2N%20relay.docx) Support of idle mode mobility for remote-UE in SL UE-to-Nwk relay Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core R2-2110767

[R2-2201511](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201511%20Remaining%20issues%20on%20service%20continuity%20for%20L2%20U2N%20Relay.docx) Remaining issues on service continuity for L2 UE to NW Relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.2.3 Adaptation layer design

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

Summary document

[R2-2200943](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200943%20-%20Summary%20of%20AI%208.7.2.3%20on%20the%20adaptation%20layer%20(Ericsson).docx) summary of AI 8.7.2.3 on the adaptation layer Ericsson discussion Rel-17 NR\_SL\_relay-Core Late

The following documents will not be individually treated

[R2-2200168](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200168.docx) Leftover Issues on Adaptation Layer Design for L2 U2N Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2200175](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200175%20-%20Remaining%20issues%20on%20adaptation%20layer%20of%20L2%20U2N%20relay.doc) Remaining issues on adaptation layer of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2200228](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200228_SL_AdaptationLayer_Intel.docx) Open aspects of adaptation layer design for L2 U2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2200335](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200335%20Remaining%20issues%20for%20Adaptation%20layer%20design%20v02.docx) Remaining issues for Adaptation layer design MediaTek Inc. discussion Rel-17

[R2-2200363](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200363%20-%20Left%20issues%20for%20adaptation%20layer.docx) Left issues for adaptation layer OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2200473](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200473%20Adaptation%20Layer%20for%20Uu%20and%20PC5.docx) Adaptation Layer for Uu and PC5 vivo discussion

[R2-2200556](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200556%20SRAP%20layer%20open%20issues%20for%20L2%20U2N%20relay.docx) SRAP layer open issues for L2 U2N relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2200567](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200567%20Remaining%20issues%20on%20SRAP.doc) Remaining issues related to SRAP Fujitsu discussion Rel-17 NR\_SL\_relay-Core

[R2-2200655](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200655%20Flow%20control%20for%20L2%20U2N%20relay.doc) Flow control for L2 U2N Relay Samsung, Philips discussion Rel-17 NR\_SL\_relay-Core R2-2110451

[R2-2200856](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200856%20Leftover%20issues%20on%20adaption%20layer%20design.docx) Leftover issues on adaption layer design CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2200937](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200937%20-%20Remaining%20issues%20of%20the%20adaptation%20layer.docx) Remaining issues of the adaptation layer Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2201347](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201347%20Discussion%20on%20adaptation%20layer%20design.doc) Discussion on adaptation layer design ZTE, Sanechips discussion Rel-17

[R2-2201465](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201465%20Remote%20ID%20for%20the%20adaptation%20layer.docx) Remote ID for the adaptation layer Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay-Core

[R2-2201492](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201492%20Remote%20UE%20local%20ID.docx) Remote UE local ID in PC5 Adaptation Layer Header Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2201533](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201533%20Finalizing%20design%20of%20Adapt%20layer_v2.doc) Finalizing design of Adapt layer Samsung Electronics GmbH discussion

#### 8.7.2.4 QoS

Mechanisms for E2E QoS management. This AI will not be treated online. Critical issues, if any, may be handled by email. This agenda item will utilise a summary document.

Summary document

[R2-2201659](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201659%20Summary%20of%20agenda%20item%208.7.2.4%20(QoS).doc) Summary of agenda item 8.7.2.4 (QoS) Samsung discussion Rel-17 NR\_SL\_relay-Core

The following documents will not be individually treated

[R2-2200169](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200169.docx) Leftover Issues on QoS Management for L2 U2N Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2200334](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200334%20Remaining%20issues%20for%20QoS.docx) Remaining issues for QoS MediaTek Inc. discussion Rel-17

[R2-2200413](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200413_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-17 NR\_SL\_relay-Core R2-2109822

[R2-2200474](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200474_E2E%20QoS.docx) Left issues on E2E QoS management vivo discussion

[R2-2200656](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200656%20QoS%20handling%20for%20SL%20discovery.doc) QoS handling for SL discovery Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2200936](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200936%20-%20Aspects%20for%20QoS%20management%20with%20SL%20relay.docx) Aspects for QoS management with SL relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2200995](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200995-%20Remaining%20Issues%20in%20QoS%20for%20L2%20Sidelink%20Relay.docx) Remaining Issues in QoS for L2 Sidelink Relay Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2201148](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201148%20(R17%20SL%20Relay%20WI_AI8724%20QoS)%20.doc) Discussion on QoS for L2 UE to NW Relays InterDigital, Philips, Apple discussion Rel-17 FS\_NR\_SL\_relay

R2-2201199 Remaining issues on QoS Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core Withdrawn

[R2-2201348](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201348%20Discussion%20on%20QoS%20of%20SL%20relay.doc) Discussion on QoS of SL relay ZTE, Sanechips discussion Rel-17

### 8.7.3 L2/L3 common topics

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

#### 8.7.3.1 Discovery

Including 5G ProSe Direct Discovery for the non-relaying case. Re-using LTE discovery as baseline. This agenda item may utilise a summary document (decision to be made based on submitted tdocs).

[R2-2200170](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200170.docx) Leftover Issues for Sidelink Discovery CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2200176](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200176%20-%20Remaining%20issues%20on%20discovery.doc) Remaining issues on discovery Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2200229](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200229_SL_discovery_Intel.docx) Discovery open aspects for U2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2200411](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200411%20Relay%20Discovery%20in%20L2%20and%20L3%20relay%20case.doc) Relay Discovery in L2 and L3 relay case Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2200475](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200475_Remaining%20Issues%20of%20Discovery%20Message%20Transmission.docx) Remaining Issues of Discovery Message Transmission vivo discussion

[R2-2200486](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200486%20Discussion%20on%20remaining%20issue%20of%20sidelink%20discovery.docx) Discussion on remaining issue of sidelink discovery OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2200514](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200514%20Discussion%20on%20SL%20discovery%20remaining%20issues.docx) Discussion on SL discovery remaining issues China Telecom discussion Rel-17 NR\_SL\_relay-Core

[R2-2200657](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200657%20PDCP%20and%20RLC%20aspects%20for%20SL%20discovery.doc) PDCP and RLC aspects for SL discovery Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2200934](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200934%20-%20Left%20issues%20for%20SL%20discovery.docx) Left issues for SL discovery Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2201138](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201138%20Discussion%20on%20remaining%20issues%20on%20relay%20discovery.doc) Discussion on remaining issues on relay discovery Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2201149](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201149%20(R17%20SL%20Relay%20WI_AI8731%20Discovery).doc) Using Shared and Dedicated Resource Pools for Discovery InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2201343](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201343%20Further%20discussion%20on%20relay%20discovery.doc) Further discussion on Relay discovery ZTE, Sanechips discussion Rel-17

[R2-2201491](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201491%20Tx%20Resources%20for%20Discovery.docx) Tx Resource Pools for Discovery Beijing Xiaomi Mobile Software discussion Rel-17

[R2-2201512](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201512%20Remaining%20issues%20on%20relay%20discovery.docx) Remaining issues on relay discovery Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.3.2 Relay re selection

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

[R2-2200177](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200177%20-%20Remaining%20issues%20on%20relay%20(re)selection.doc) Remaining issues on relay (re)selection Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2200422](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200422_U2N%20Relay%20UE%20operation%20Threshold%20Conditions%20-%20Impact%20of%20UE%20mobility.docx) U2N Relay UE operation Threshold Conditions: Impact of UE Mobility Philips International B.V., FirstNet, MediaTek, Lenovo, Motorola Mobility discussion Rel-17 NR\_SL\_relay-Core R2-2109823

[R2-2200171](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200171.docx) Leftover Issues for Relay Reselection CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2200476](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200476_Remaining%20Issues%20on%20Relay%20(re)selection.docx) Remaining issues on Relay (re)selection vivo discussion

[R2-2200487](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200487%20Discussion%20on%20remaining%20issue%20of%20relay%20reselection.docx) Discussion on remaining issues of NR sidelink relay (re)selection OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2200626](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200626.doc) Left issues on NotificationMessageSidelink message Spreadtrum Communications discussion Rel-17

[R2-2200778](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200778%20Relay%20(re)selection%20in%20L2%20and%20L3%20relay%20case%20v1.0.doc) Relay (re)selection for L2 and L3 relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2200935](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200935%20-%20Aspects%20for%20SL%20relay%20selection%20and%20reselection.docx) Aspects for SL relay selection and reselection Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2201198](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201198.docx) Discussion on relay reselection aspects Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2201344](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201344%20Further%20discussion%20on%20relay%20selection.doc) Further discussion on Relay selection ZTE, Sanechips discussion Rel-17

## 8.11 NR positioning enhancements

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

Time budget: 2 TU

Tdoc Limitation: 7 tdocs

Email max expectation: 7 threads

### 8.11.1 Organizational

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

Open issue list and work planning (including UE capabilities)

[R2-2200285](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200285%20Open%20issue%20lists%20on%20Rel-17%20positioning%20WI.docx) Open issue lists on Rel-17 positioning WI Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2200284](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200284%20Rel-17%20positioning%20capabilities.docx) Rel-17 positioning capabilities Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

Incoming LS with RAN2 in Cc:

[R2-2200113](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200113_R3-216235.docx) Reply LS on location estimates in local co-ordinates (R3-216235; contact: Huawei) RAN3 LS in Rel-17 5G\_eLCS\_ph2 To:RAN1, SA2 Cc:RAN2

Incoming LSs with “take into account” action

[R2-2200074](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200074_R1-2112784.docx) LS on latency improvement for PRS measurement with MG (R1-2112784; contact: Huawei) RAN1 LS in Rel-17 NR\_pos\_enh To:RAN2, RAN3

[R2-2200082](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200082_R1-2112844.docx) LS on TRP beam/antenna information (R1-2112844; contact: Ericsson) RAN1 LS in Rel-17 NR\_pos\_enh To:RAN2, RAN3

[R2-2200083](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200083_R1-2112846.docx) LS on configuration and transmission of SRS for positioning in RRC\_INACTIVE state (R1-2112846; contact: Intel) RAN1 LS in Rel-17 NR\_pos\_enh-Core To:RAN2

[R2-2200089](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200089_R1-2112881.docx) LS on PRS processing window (R1-2112881; contact: Huawei) RAN1 LS in Rel-17 NR\_pos\_enh To:RAN2, RAN3

[R2-2200092](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200092_R1-2112968.docx) LS on the reporting of the Tx TEG association information (R1-2112968; contact: CATT) RAN1 LS in Rel-17 NR\_pos\_enh-Core To:RAN2, RAN4 Cc:RAN3

[R2-2200139](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200139_S2-2109104.docx) Reply LS on Response LS on Positioning Reference Units (PRUs) for enhancing positioning performance (S2-2109104; contact: Huawei) SA2 LS in Rel-17 NR\_pos\_enh-Core To:RAN2 Cc:RAN1, RAN3

[R2-2200140](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200140_S2-2109105.docx) Response LS on Positioning Reference Units (PRUs) for enhancing positioning performance (S2-2109105; contact: CATT) SA2 LS in Rel-17 5G\_eLCS\_ph2 To:RAN1, RAN2 Cc:RAN3

Draft replies

[R2-2200302](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200302%20Reply%20LS%20on%20the%20Response%20LS%20on%20Positioning%20Reference%20Units%20(PRUs)%20for%20enhancing%20positioning%20performance.docx) [Draft]Reply LS on the Response LS on Positioning Reference Units (PRUs) for enhancing positioning performance CATT LS out Rel-17 NR\_pos\_enh-Core To:SA2 Cc:RAN1, RAN3

Draft replies not from LS contact company

[R2-2200523](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200523%20%5bDraft%5d%20Response%20LS%20on%20the%20latency%20improvement%20for%20PRS%20measurement%20with%20MG.docx) [Draft] Response LS on the latency improvement for PRS measurement with MG ZTE LS out To:RAN1 Cc:RAN3

[R2-2200524](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200524%20%5bDraft%5d%20Response%20LS%20on%20the%20PRS%20processing%20window.docx) [Draft] Response LS on the PRS processing window ZTE LS out To:RAN1 Cc:RAN3

[R2-2200525](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200525%20%5bDraft%5d%20Response%20LS%20on%20the%20reporting%20of%20the%20Tx%20TEG%20association%20information.docx) [Draft] Response LS on the reporting of the Tx TEG association information ZTE LS out To:RAN1 Cc:RAN3,RAN4

[R2-2200526](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200526%20%5bDraft%5d%20Response%20LS%20on%20the%20TRP%20beam%20antenna%20information.docx) [Draft] Response LS on the TRP beam antenna information ZTE LS out To:RAN1 Cc:RAN3

Running CRs

[R2-2200282](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200282-Running%2038.305.docx) Running 38.305 CR for Positioning WI on RAT dependent positioning methods Intel Corporation draftCR Rel-17 38.305 16.7.0 B NR\_pos\_enh-Core

[R2-2200431](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200431%20Running%20MAC%20CR%20for%20R17%20Positioning.docx) Draft running CR for MAC spec in R17 positioning Huawei, HiSilicon draftCR Rel-17 38.321 16.7.0 B NR\_pos\_enh-Core

[R2-2200432](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200432%20Draft%20running%20CR%20for%20LTE%20RRC%20spec%20for%20GNSS%20integrity%20in%20R17%20positioning.docx) Draft running CR for LTE RRC spec for GNSS integrity in R17 positioning Huawei, HiSilicon draftCR Rel-17 36.331 16.7.0 B NR\_pos\_enh-Core

[R2-2200959](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200959_(37355%20running%20CR)_v1.docx) Running LPP CR for NR positioning enhancements Qualcomm Incorporated draftCR Rel-17 37.355 16.7.0 B NR\_pos\_enh

[R2-2201390](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201390_(Running%20CR%20of%2036_305%20GNSS%20Pos%20Integrity).docx) Running CR of 36.305 for GNSS Positioning Integrity InterDigital, Inc. draftCR Rel-17 36.305 16.4.0 B NR\_pos\_enh-Core

[R2-2201391](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201391_(Running%20CR%20of%2038_305%20GNSS%20Pos%20Integrity).docx) Running CR of 38.305 for GNSS Positioning Integrity InterDigital, Inc. draftCR Rel-17 38.305 16.7.0 B NR\_pos\_enh-Core

### 8.11.2 Latency enhancements

Enhancements of signalling, and procedures for improving positioning latency of the Rel-16 NR positioning methods, for DL and DL+UL positioning methods. Including scheduled location time, preconfigured assistance data, UE capability storage, measurement gap and PRS priority; any other topics will be treated at lower priority. This agenda item will utilise a summary document.

Summary document

R2-2201652 Summary on agenda item 8.11.2 on Latency Enhancements Qualcomm Incorporated discussion Rel-17 NR\_pos\_enh-Core

The following documents will not be individually treated

[R2-2200256](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200256%20Discussion%20on%20positioning%20latency%20reduction.docx) Discussion on positioning latency reduction ZTE discussion

[R2-2200278](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200278.docx) Leftover issues on Latency reduction Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2200279](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200279.docx) RAN1 issues on Latency reduction Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2200304](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200304%20Discussion%20on%20latency%20reduction%20enhancement.docx) Discussion on latency reduction enhancement CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2200326](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200326%20Discussion%20on%20latency%20enhancement_cl.docx) Discussion on latency enhancement vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2200428](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200428%20Discussion%20on%20pre-configured%20PRS.docx) Discussion on PRS preconfiguration Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2200430](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200430%20Discussion%20on%20MGenh%20and%20PPW%20for%20positioning%20latency%20reduction.docx) Discussion on MG/PPW enhancement for positioning Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2200559](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Docs\R2-2200559.zip) Further consideration of positioning latency enhancements OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2200709](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200709%20Positioning%20enhancement%20on%20latency%20reduction.doc) Positioning enhancement on latency reduction. Xiaomi discussion

[R2-2200730](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200730%20Discussion%20on%20the%20response%20time.docx) Discussion on the response time Samsung discussion Rel-17 NR\_pos\_enh-Core

[R2-2200914](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200914_Pos_latency.docx) Considerations on positioning latency Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2200958](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200958_RRC_INACTIVE_Fraunhofer_Ericsson_Lenovo_Vivo.docx) Providing a list of AD for reducing signalling load and latency Fraunhofer IIS; Fraunhofer HHI; Ericsson; Lenovo; Vivo discussion

[R2-2200962](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200962_(Scheduling%20Location%20in%20Advance).docx) Remaining Issues on Scheduling Location in Advance Qualcomm Incorporated discussion

[R2-2200988](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200988_PosLatencyReduction_LenMM.docx) On Positioning Latency Reduction Enhancements Lenovo, Motorola Mobility discussion Rel-17

[R2-2201069](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201069%20RRC%20and%20MAC%20Impacts.docx) Discussion On RRC and MAC Impacts, TP on RRC Impacts Ericsson discussion Rel-17

[R2-2201184](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201184%20(R17%20NR%20POS%20WI_AI8112_Latency).doc) Discussion on Enhancements for Latency Reduction InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2201185](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201185%20(R17%20NR%20POS%20WI_AI8112_Latency_MG).doc) Discussion on Measurement Gap and PRS Priority Enhancements InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2201309](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201309%20(8.11.2)%20Simulation%20study%20for%20multiple%20QoS%20class%20handling%20for%20latency%20reduction.docx) Simulation study for multiple QoS class handling for latency reduction Samsung R&D Institute UK discussion

[R2-2201311](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201311%20(8.11.2)%20multiple%20QoS%20handling%20for%20latency%20reduction.docx) Handling of multiple QoS for latency reduction Samsung R&D Institute UK discussion R2-2111083

[R2-2201312](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201312%20(8.11.2)%20latency%20reduction%20by%20MG%20config.docx) Latency reduction via new measurement gap activation Samsung R&D Institute UK discussion

### 8.11.3 RRC\_INACTIVE

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

Summary document

R2-2201068 Summary of AI 8.11.3 RRC\_INACTIVE Ericsson discussion Rel-17 Late

The following documents will not be individually treated

[R2-2200257](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200257%20Discussion%20on%20positioning%20in%20RRC%20INACTIVE%20state.docx) Discussion on positioning in RRC INACTIVE state ZTE discussion

[R2-2200280](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200280%20Support%20of%20UL&UL+DL%20positioning%20in%20RRC_INACTIVE.docx) Support of UL&UL+DL positioning in RRC\_INACTIVE Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2200295](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200295%20Impact%20on%20SA2%20with%20DL%20NR%20Positioning%20in%20RRC_INACTIVE%20state.docx) Impact on SA2 with DL NR positioning in RRC\_INACTIVE CATT, Ericsson discussion Rel-17 NR\_pos\_enh-Core

[R2-2200296](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200296%20Considerations%20on%20UL%20NR%20Positioning%20in%20RRC_INACTIVE%20state.docx) Discussion on UL NR Positioning in RRC\_INACTIVE state CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2200327](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200327%20Discussion%20on%20positioning%20in%20RRC_INACTIVE_cl.docx) Discussion on positioning in RRC\_INACTIVE vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2200424](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200424%20Way-forward%20for%20RRC_INACTIVE%20positioning.docx) Way-forward for RRC\_INACTIVE positioning Huawei, CATT, China Unicom, CMCC, Fraunhofer, Futurewei, HiSilicon, Intel Corporation, Spreadtrum Communications, OPPO, VIVO, Xiaomi, ZTE Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2200425](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200425%20Remaining%20issues%20on%20RRC_INACTIVE%20DL%20Postioning.docx) Remaining issues on RRC\_INACTIVE DL Postioning Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2200710](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200710%20Discussion%20on%20positioning%20for%20UE%20in%20RRC%20Inactive.doc) Discussion on positioning for UE in RRC Inactive Xiaomi discussion

[R2-2200731](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200731%20Discussion%20on%20the%20measurement%20reporting%20in%20RRC_INACTIVE.docx) Discussion on the measurement reporting in RRC\_INACTIVE Samsung discussion Rel-17 NR\_pos\_enh-Core

[R2-2200781](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200781-%20Discussion%20on%20Positioning%20in%20RRC_INACTIVE%20state.docx) Discussion on Positioning in RRC\_INACTIVE state OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2200957](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200957_RRC_INACTIVE_Uplink_Fraunhofer.docx) Remaining Details for RRC\_INACTIVE Positioning in Uplink Fraunhofer IIS; Fraunhofer HHI discussion Rel-17 R2-2110249

[R2-2200963](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200963_(Positioning%20in%20RRC_INACTIVE).docx) Remaining issues for positioning of UEs in RRC\_INACTIVE State Qualcomm Incorporated discussion

[R2-2200989](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200989_RRCInactive_Positioning_LenMM.docx) Remaining aspects on RRC\_INACTIVE Positioning Lenovo, Motorola Mobility discussion Rel-17

[R2-2201065](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201065%20RRC%20Inactive%20.docx) Discussion on RRC Inactive mode Positioning Ericsson discussion Rel-17

[R2-2201186](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201186%20(R17%20NR%20POS%20WI%20AI8113_INACTIVE).doc) Discussion on Positioning in RRC INACTIVE state InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2201528](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201528.docx) Positioning in RRC\_INACTIVE Nokia Germany discussion Rel-17

[R2-2200961](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200961_(LS%20to%20SA2%20on%20RRC_INACTIVE).docx) [draft] LS on Positioning in RRC\_INACTIVE State Qualcomm Incorporated LS out Rel-17 NR\_pos\_enh To:SA2 Cc:RAN3

### 8.11.4 On-demand PRS

Specify UE-initiated and LMF-initiated on-demand transmission and reception of DL PRS for DL and DL+UL positioning for UE-based and UE-assisted positioning solutions.

Including outcome of [Post116-e][601][POS] Network control and UE request for on-demand PRS parameters (Ericsson)

Email discussion summary

[R2-2200047](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200047%20ODPRS.docx) Report on Procedures and signalling for on-demand PRS Ericsson discussion

Other documents

[R2-2200258](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200258%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS ZTE discussion

[R2-2200281](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200281.docx) Support of On-Demand PRS request Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2200303](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200303%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2200328](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200328%20Discussion%20on%20on-demand%20PRS_cl.docx) Discussion on on-demand PRS vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2200426](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200426%20Discussion%20on%20on-demand%20PRS.docx) Discussion on on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2200711](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200711%20Positioning%20enhancement%20about%20on-demand%20DL%20PRS%20.doc) Positioning enhancement about on-demand DL PRS Xiaomi discussion

[R2-2200780](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200780%20-%20Discussion%20on%20on-demand%20DL-PRS.doc) Discussion on on-demand DL-PRS OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2200915](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200915_Pos_PRS_Ondemand.docx) Considerations on positioning PRS On-demand and two stage beam sweeping Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2200956](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200956_OnDemandPRS_Fraunhofer.docx) On-demand PRS Fraunhofer IIS, Fraunhofer HHI discussion Rel-17 R2-2110247 Withdrawn

[R2-2200964](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200964_(On-demand%20PRS).docx) Remaining issues for on-demand DL-PRS Qualcomm Incorporated discussion

[R2-2200993](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200993_On-DemandPRS_LenMM.docx) Remaining issues on On-Demand DL-PRS Lenovo, Motorola Mobility discussion Rel-17

[R2-2201067](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201067%20On-demand%20PRS.docx) Remaining issues on On-demand PRS Ericsson discussion Rel-17

[R2-2201103](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201103-on-demand-PRS-v0.docx) On the need for additional On-Demand PRS enhancements Apple discussion NR\_pos\_enh-Core

[R2-2201187](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201187%20(R17%20NR%20POS%20WI_AI8114_OnDemandPRS).doc) Discussion on On-demand PRS InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2201257](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201257.docx) Network Control Mechanisms for On-demand PRS Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2201267](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201267.docx) On the on-demand PRS Stage 2 Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2201273](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201273.docx) Pre-configured and Pre-defined PRS Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2201313](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201313%20(8.11.4)%20on%20demand%20PRS%20for%20positioning.docx) On-demand PRS request and configuration Samsung R&D Institute UK discussion

[R2-2201627](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201627_OnDemandPRS_Fraunhofer.docx) On-demand PRS Fraunhofer IIS, Fraunhofer HHI discussion Rel-17 R2-2110247

### 8.11.5 GNSS positioning integrity

Signalling, and procedures to support GNSS positioning integrity determination.

Including outcome of [Post116-e][602][POS] Stage 2 baseline for integrity assistance data (Swift)

Email discussion summary

[R2-2200012](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200012_%5bPost116-e%5d%5b602%5d%5bPOS%5d%20Stage%202%20Integrity%20AD%20Summary.docx) [Post116-e][602][POS] Stage 2 baseline for integrity assistance data (Swift) Swift discussion 36.305

Comments on running CRs

[R2-2200013](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200013_Running_CR%20of%2036_305%20GNSS%20Pos%20Integrity.docx) Running CR on 36.305 for Stage 2 integrity assistance data Swift draftCR Rel-17 36.305 16.4.0 B NR\_pos\_enh-Core

[R2-2200014](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200014_Running%20CR%20of%2038_305%20GNSS%20Pos%20Integrity.docx) Running CR on 38.305 for Stage 2 integrity assistance data Swift draftCR Rel-17 38.305 16.7.0 B NR\_pos\_enh-Core

Other documents

[R2-2200185](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200185%20Signalling%20for%20GNSS%20Positioning%20Integrity%20Framework.docx) Signalling for GNSS Positioning Integrity Framework Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_pos\_enh

[R2-2200259](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200259%20Discussion%20on%20positioning%20integrity.docx) Discussion on positioning integrity ZTE discussion

[R2-2200329](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200329%20Discussion%20on%20GNSS%20positioning%20integrity_cl.docx) Discussion on GNSS positioning integrity vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2200427](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200427%20Remaining%20issues%20on%20positioning%20integrity.docx) Remaining issues on positioning integrity Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2200955](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200955_UE_Integrity_Fraunhofer_Ericsson_ESA.docx) UE-aided detection of threat to GNSS systems and assistance data signaling Fraunhofer IIS; Fraunhofer HHI; Ericsson; ESA discussion R2-2110246

[R2-2201063](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201063%20GNSS%20Integrity.docx) On GNSS Integrity Ericsson discussion Rel-17

[R2-2201188](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201188%20(R17%20NR%20POS%20WI%20AI8115_GNSS_Integrity).doc) Discussion on GNSS Positioning Integrity InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2201214](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201214%20-%20Stage3_GNSS_Integrity.docx) Stage 3 Proposals on GNSS Positioning Integrity Swift Navigation, Mitsubishi Electric Corporation, Ericsson discussion Rel-17

[R2-2201314](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201314%20(8.11.5)%20Consideration%20on%20the%20signalling%20design%20for%20Positioning%20Integrity%20for%20UE%20based%20method.docx) Consideration on the signalling design for Positioning Integrity for UE-based method Samsung R&D Institute UK discussion

### 8.11.6 A-GNSS enhancements

Including support of BDS B2a and B3I signals and support of NavIC. This agenda item will not be treated online. Critical issues, if any, may be handled by email.

[R2-2200298](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200298%20Introduction%20of%20B2a%20and%20B3I%20signal%20in%20BDS%20system%20in%20A-GNSS.docx) Introduction of B2a and B3I signal in BDS system in A-GNSS CATT, CAICT draftCR Rel-17 37.355 16.7.0 B NR\_pos\_enh-Core

[R2-2201070](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201070%20NavIC%20RRC.docx) Impacts of NavIC in NR RRC Ericsson discussion Rel-17

[R2-2200433](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200433%20Draft%20running%20CR%20for%20stage2%20spec%20for%20NavIC%20in%20R17%20positioning.docx) Draft running CR for stage2 spec for NAVIC in R17 positioning Huawei, HiSilicon draftCR Rel-17 38.305 16.7.0 B NR\_pos\_enh-Core

### 8.11.7 Accuracy enhancements

Input on the accuracy enhancement objectives led by RAN1. This agenda item will not be treated online. Critical issues, if any, may be handled by email.

PRUs

[R2-2200283](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200283%20Support%20of%20PRU.docx) Support of PRU Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2200712](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200712%20Discussion%20on%20positioning%20reference%20unit.doc) Discussion on positioning reference unit Xiaomi discussion

[R2-2200994](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200994_PRUs_LenMM.docx) Support of Positioning Reference Units Lenovo, Motorola Mobility discussion Rel-17

[R2-2201064](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201064%20PRU.docx) On the Positioning Reference Units aspects Ericsson discussion Rel-17

[R2-2201087](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201087.docx) Way forward on PRUs for Rel-17 MediaTek Inc., Apple discussion Rel-17 NR\_pos\_enh-Core

[R2-2201191](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201191%20(R17%20NR%20POS%20WI%20AI8117_PRU).doc) Discussion on supporting Positioning Reference Units InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

Other accuracy enhancements

[R2-2200297](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200297%20Discussion%20on%20addtional%20TRP%20beam%20and%20antenna%20information.docx) Discussion on additional TRP beam/antenna information CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2200299](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200299%20Discussion%20on%20stage-2%20impact%20of%20mitigating%20UE%20and%20TRP%20RxTx%20timing%20delays.docx) Discussion on stage-2 impact of mitigating UE and TRP RxTx timing delays CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2200300](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200300%20Discussion%20on%20LPP%20and%20RRC%20signaling%20impact%20of%20mitigating%20UE%20and%20TRP%20RxTx%20timing%20delays.docx) Discussion on LPP and RRC signaling impact of mitigating UE and TRP RxTx timing delays CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2200301](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200301%20%5bDraft%5dReply%20LS%20on%20the%20reporting%20of%20the%20Tx%20TEG%20association%20information(R1-2112968).docx) [Draft]Reply LS on the reporting of the Tx TEG association information CATT LS out Rel-17 NR\_pos\_enh-Core To:RAN1, RAN3 Cc:RAN4

[R2-2200330](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200330%20Discussion%20on%20accuracy%20enhancements_cl.docx) Discussion on accuracy enhancements vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2200429](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200429%20Discussion%20on%20accuracy%20enhancement.docx) Discussion on accuracy enhancement Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2200916](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200916_Pos_PRU_TEG.docx) Considerations on Timing Error aspects Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2201062](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201062%20LPP%20High%20Accuracy.docx) LPP Positioning enhancements on timing errors , DL-AoD and LoS/NLoS/multipath Ericsson discussion Rel-17

[R2-2201104](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201104-accuracy-RAN1-v1.docx) Signalling impacts of RAN1 agreements on accuracy enhancements Apple discussion NR\_pos\_enh-Core

[R2-2201189](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201189%20(R17%20NR%20POS%20WI%20AI8117_AccEnh).doc) Discussion on Accuracy Enhancements InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2201360](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201360%20Discussion%20on%20accuracy%20improvement%20for%20UE-assisted%20DL-AOD%20positioning_cl.docx) Discussion on accuracy improvement for UE-assisted DL-AOD positioning vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2200527](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200527%20Discussion%20on%20signalling%20support%20of%20RAN1%20agreements.docx) Discussion on signalling support of RAN1 agreements ZTE discussion

[R2-2201066](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2201066%20Beam%20information%20for%20DL%20AOD%20in%20NR%20.docx) Beam/antenna information for DL AOD in NR positioning Ericsson discussion Rel-17

### 8.11.8 Other

Input on other WI objectives. This agenda item will not be treated online. Critical issues, if any, may be handled by email.

[R2-2200331](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200331%20Discussion%20on%20positioning%20reference%20unit_cl.docx) Discussion on positioning reference unit vivo discussion Rel-17 NR\_pos\_enh-Core

R2-2200438 Summary of email discussion for PRU Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Late

[R2-2200965](file:///C:\Users\mtk16923\Documents\3GPP%20Meetings\202201%20-%20RAN2_116bis-e,%20Online\Extracts\R2-2200965_(PRUs).docx) On PRU support in Release-17 Qualcomm Incorporated discussion