3GPP TSG-RAN WG2 Meeting #114 electronic [R2-2106474](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106474.zip)

Online, May, 2021

Source: Session Chair (InterDigital)

Title: Report for Rel-17 Small data and URLLC/IIoT

**Email discussions:**

* [AT114e][500] Organizational Diana – URLLC/IIoT, Small data]

Scope:

* + - Share plans for the meetings and list of ongoing email discussions for the sessions related to URLLC/IIoT, Small data and NR-U, 2-step RACH, and power saving
		- Share meetings notes and agreements for review and endorsement

## 8.5 NR IIoT URLLC

(NR\_IIOT\_URLLC\_enh-Core; leading WG: RAN2; REL-17; WID: RP-210854)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 4 threads

### 8.5.1 Organizational

Rapporteur input

[R2-2104720](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104720.zip) LS on gNB-based propagation delay compensation (R3-211136; contact: Nokia) RAN3 LS in Rel-17 NR\_IIOT\_URLLC\_enh To:RAN1, RAN2

[R2-2105867](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105867.zip) Text Proposal of Stage-2 Running CR for Rel-17 IIoT/URLLC Enhancement Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

### 8.5.2 Enhancements for support of time synchronization

Including requirements and scope.

A summary email discussion is expected for this topic

[R2-2104729](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104729.zip) LS on Time Synchronization assistance parameters (S2-2103023; contact: Nokia) SA2 LS in Rel-17 NR\_IIOT-Core To:RAN2, RAN3 Cc:RAN1

[R2-2105868](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105868.zip) Time Synchronization Signalling Analysis Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

*Proposal 1: RAN2 confirms it is beneficial for the RAN if CN provides Uu synchronicity budget and worst-case assumption CN for the achievable time synchronization. Indicate this in the reply LS to SA2.*

[R2-2105674](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105674.zip) Determining per Uu Interface Time Sync Error Budget Ericsson discussion

*Proposal 1: For Rel-17 deployments, the Uu interface budget for time synchronization can be derived by network implementation and thus it is not beneficial to receive it from the core network.*

[R2-2105871](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105871.zip) [Draft] Reply LS on Time Synchronization assistance parameters Nokia, Nokia Shanghai Bell LS out Rel-17 NR\_IIOT\_URLLC\_enh To:SA2 Cc:RAN3

[R2-2104886](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104886.zip) Pre-compensation at the gNB for RTT and TA based PDC Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2104898](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104898.zip) Design for Time Synchronization in Rel-17 CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104901](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104901.zip) Propagation Delay Compensation for TSN Qualcomm Incorporated discussion Rel-17

[R2-2105255](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105255.zip) Discussion on the Time synchronisation assistance parameters Huawei, HiSilicon discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105289](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105289.zip) Discussion on the propagation delay compensation vivo discussion

[R2-2105307](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105307.zip) Further discussion on time synchronization and PDC ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion NR\_IIOT\_URLLC\_enh-Core [R2-2100327](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2100327.zip)

[R2-2105565](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105565.zip) Consideration on the support of time synchronization enhancement OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105672](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105672.zip) On propagation delay compensation MediaTek Inc. discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105723](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105723.zip) Discussion on the time synchronization error budget in RAN Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105766](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105766.zip) Synchronization and Error Budget Samsung discussion Rel-17

[R2-2105825](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105825.zip) Discussion on enabling UE side propagation delay compensation Lenovo, Motorola Mobility discussion Rel-17

[R2-2105844](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105844.zip) Propagation Delay Compensation Signaling CANON Research Centre France discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2106249](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106249.zip) Support of time synchronization for TSN based on RAN1 progress CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106323](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106323.zip) Discussion on Propagation Delay Compensation (PDC) III discussion

[R2-2106324](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106324.zip) Timing synchronization for UE in RRC\_INACTIVE state and RRC\_IDLE state TCL Communication Ltd. discussion Rel-17 NR\_IIOT, NR\_IIOT-Core, NR\_IIOT\_URLLC\_enh-Core

[R2-2106433](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106433.zip) Discussion on enhancements for support of time synchronization LG Electronics Deutschland discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

### 8.5.3 Uplink enhancements for URLLC in unlicensed controlled environments

Including email discussion [POST113bis-e][505][R17 IIoT] URLLC in UCE (LG)

Contributions should aim to bring new issues not covered in email discussions already and should be clearly separated in the document from issues covered in email discussions.

RAN2 aspects related to URLLC in unlicensed controlled environments. Initial discussion on potential impacts, including requirements and scope

[R2-2106396](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106396.zip) Summary of [POST113bis-e][505][R17 IIoT] URLLC in UCE LG Electronics Inc. discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104899](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104899.zip) Autonomous retransmission on a different CG configuration CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104902](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104902.zip) CG Harmonization for Unlicensed Controlled Environment Qualcomm Incorporated discussion Rel-17

[R2-2105256](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105256.zip) Remaining issues about uplink enhancements for URLLC in UCE Huawei, HiSilicon discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105290](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105290.zip) Remaining issues of harmonizing UL CG enhancements in NR-U and IIoT vivo discussion

[R2-2105456](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105456.zip) Further details on enhancements for URLLC in UCE Lenovo, Motorola Mobility discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105566](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105566.zip) Consideration on URLLC over NR-U OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105675](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105675.zip) Harmonizing UL CG enhancements in NR-U and URLLC Ericsson discussion

[R2-2105676](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105676.zip) RAN enhancements based on new QoS related parameters Ericsson discussion Withdrawn

[R2-2105689](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105689.zip) Prioritization of UL transmissions in unlicensed URLLC Sony discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core [R2-2103566](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103566.zip)

[R2-2105724](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105724.zip) Remaining issues of CG harmonization Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105789](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105789.zip) Configured grant mode switching for IIoT/URLLC in unlicensed controlled environments III discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105856](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105856.zip) Further Consideration On the URLLC transmission in UCE ZTE, Sanechips discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105872](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105872.zip) Remaining Issues on Configured Grant for IIoT in NR-U Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2105952](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105952.zip) Uplink enhancements for URLLC in unlicensed controlled environments Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106226](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106226.zip) Discussion on the remaining issue for uplink enhancements for URLLC in UCE CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2106381](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106381.zip) Remaining Issue of Harmonization of CG Transmission Samsung discussion Rel-17

[R2-2106395](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106395.zip) Summary of [POST113bis-e][505][R17 IIoT] URLLC in UCE LG Electronics Inc. discussion Late

=> Withdrawn

[R2-2106400](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106400.zip) URLLC on UCE LG Electronics Inc. discussion NR\_IIOT\_URLLC\_enh-Core Late

### 8.5.4 RAN enhancements based on new QoS

Including email discussion [POST113bis-e][506][R17 IIoT] Enhancements based on QoS (CATT)

Contributions should aim to bring new issues not covered in email discussions already and should be clearly separated in the document from issues covered in the email discussion

RAN enhancements based on new QoS related parameters if any, e.g. survival time, burst spread, decided in SA2. [RAN2, RAN3]

[R2-2104897](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104897.zip) Summary of Email Discussion 506 – R17 IIOT QoS CATT discussion NR\_IIOT\_URLLC\_enh-Core Late

Proposal 1: When Survival Time information is provided in TSC AI, RAN action (gNB and/or UE) can utilize it to improve the associated link reliability so that the survival time requirement is met.

Proposal 7 (19/21): No specific enhancements in support of Survival Time in UCE will be studied in R17.

Proposal 12 (20/20): RAN2 does not consider the Burst Spread parameter in RAN.

Proposal 13 (16/18): The Burst End Time parameter in RAN is out of scope for Rel-17 IIoT WI.

Proposal 2 (14/20): Survival Time handling is not left to gNB implementation only.

Proposal 3 (14/19): Survival Time triggered proactively based on Sequence Number is deprioritized.

Proposal 4 (14/20): If P2 is agreed, RAN2 further studies UE-based reactive Survival Time trigger, aiming at addressing the issues raised in this email discussion (e.g. resource waste, feedback reliability).

Proposal 5 (9/14): If P4 is agreed, RAN2 continues studying Tx-side timer method for triggering ST, addressing the issues raised in this email discussion (e.g. gNB always sending ACK/NACK).

Proposal 6 (8/14): If P4 is agreed, RAN2 continues studying HARQ-NACK based Survival Time trigger, addressing the issues raised in this email discussion (e.g. case of multiple retransmission grants for a single message, or absence of retransmission grant if gNB does not want to recover the failed transmission).

Proposal 8 (16/21): UE-based duplication activation upon Survival Time trigger is supported.

Proposal 9 (11/19): RAN2 to discuss if UE adapting its L1/L2 configuration when Survival Time is triggered should be envisioned on top of UE-based duplication activation.

Proposal 10 (11/19): RAN2 to discuss the need for a Survival Time timer for monitoring the Survival Time itself.

Proposal 11 (11/19): RAN2 to discuss whether a solution should be specified allowing the UE to autonomously return to normal state (default reliability) based on a pre-configured criterion.

[R2-2104900](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104900.zip) Comparison of the solutions for Survival Time CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104903](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104903.zip) RAN Enhancement to support new QoS Qualcomm Incorporated discussion Rel-17

[R2-2104980](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104980.zip) Topics on new QoS handling Fujitsu discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core [R2-2003196](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2003196.zip)

[R2-2105114](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105114.zip) Reliability enhancements for CG/SPS Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105115](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105115.zip) Further considerations on survival time for new QoS Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105312](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105312.zip) Further discussion on enhanced QoS ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105419](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105419.zip) Further discussion on RAN enhancements based on Survival Time III discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105457](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105457.zip) Discussion on the mechanism to guarantee the survival time Lenovo, Motorola Mobility discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105567](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105567.zip) Consideration on RAN enhancement based on new QoS OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105604](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105604.zip) Entering and operating in the Survival Time state Samsung Electronics GmbH discussion Withdrawn

[R2-2105615](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105615.zip) Entering and operating in the Survival Time state Samsung Electronics GmbH discussion Withdrawn

[R2-2105638](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105638.zip) Entering and operating in the Survival Time state Samsung Electronics GmbH discussion

[R2-2105725](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105725.zip) Clarification on the survival time Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core [R2-2104288](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104288.zip)

[R2-2105873](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105873.zip) RAN Enhancement for New QoS Parameters Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2105954](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105954.zip) Discussion on the roles played in the survival time operation Futurewei Technologies discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106041](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106041.zip) Discussion on multi-level PERs for survival time handling Huawei, HiSilicon discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106044](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106044.zip) Enhancements based on new QoS requirements InterDigital discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106066](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106066.zip) RAN2 Enhancements to Support Survival Time Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106227](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106227.zip) Discussion on the RAN support for new QoS parameters CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2106328](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106328.zip) Discussion of RAN enhancements based on new QoS TCL Communication Ltd. discussion Rel-17 NR\_IIOT, NR\_IIOT-Core, NR\_IIOT\_URLLC\_enh-Core

[R2-2106397](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106397.zip) Enhancement for survival time LG Electronics Inc. discussion NR\_IIOT\_URLLC\_enh-Core Late

[R2-2106413](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106413.zip) RAN enhancements based on new QoS related parameters Oy LM Ericsson AB discussion

## 8.6 Small Data enhancements

(NR\_SmallData\_INACTIVE-Core; leading WG: RAN2; REL-17; WID: RP-210870)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 2 threads

### 8.6.1 Organizational

In coming LSs, rapporteur input for email discussions summaires etc (tdocs in this don’t count towards tdoc limit).

Inputs expected for 38.321 CR (Huawei), 38.331 CR (ZTE), 38.300 CR (Nokia)

[R2-2104707](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104707.zip) Reply LS on uplink timing alignment for small data transmissions (R1-2104012; contact: Lenovo) RAN1 LS in Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN2 Cc:RAN4

[R2-2105032](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105032.zip) Runnning MAC CR for small data Huawei, HiSilicon draftCR Rel-17 38.321 16.4.0 B NR\_SmallData\_INACTIVE-Core

[R2-2105639](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105639.zip) Discussion on the spec modeling for Small Data Huawei, HiSilicon, ZTE Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core Revised

[R2-2105847](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105847.zip) Discussion on the spec modeling for Small Data Huawei, HiSilicon, ZTE corporation, Sanechips discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2105639](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105639.zip)

[R2-2105877](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105877.zip) Stage-2 running CR Introduction of SDT Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.5.0 0357 1 B NR\_SmallData\_INACTIVE-Core [R2-2103527](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103527.zip)

[R2-2105927](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105927.zip) RRC Running CR for SDT ZTE Corporation (rapporteur) draftCR Rel-17 38.331 16.4.1 B NR\_SmallData\_INACTIVE-Core

### 8.6.2 User plane common aspects

This AI will NOT be treated in RAN2#114

NOTE: expected input: paper containing the remaining proposals not discussed as part of [AT113bis-e][501] from rapporteur. This is the only paper that may be treated.

Overall user plane procedure for SDT (including triggering and thresholds, HARQ, and MAC CEs), data volume computation,. suppression of PDCP status report, RSRP threshold for SDT selection, switching between CG/RA

Email discussion summary expected for this AI durin 113bis-e

[R2-2106310](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106310.zip) Remaining untreated proposals from [AT113bis-e][501] UP SDT open issues LG Electronics Inc. (Rapporteur) report Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104760](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104760.zip) Further Discussion on User Plane Aspect for Small Data Transmission vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104770](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104770.zip) Discussion on common user plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104784](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104784.zip) User Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104964](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104964.zip) Handling of fallback during a SDT procedure Asia Pacific Telecom, FGI discussion

[R2-2105280](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105280.zip) Consideration on UP common aspects of SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105447](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105447.zip) User plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105455](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105455.zip) UP common issues for Small Data Transmissions Lenovo, Motorola Mobility discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105597](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105597.zip) Consideration on overall SDT procedure LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105690](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105690.zip) Some aspects of User Plane for SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103583](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103583.zip)

[R2-2105760](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105760.zip) Common aspects for SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106043](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106043.zip) User plane aspects of small data transmission InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106254](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106254.zip) Remaining issues on SDT procedure CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106311](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106311.zip) Remaining UP issues in SDT LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.3 Control plane common aspects

NOTE: expected input: paper containing the remaining proposals not discussed as part of [Post113-e][503] from rapporteur to be treated.

Focus contributions on FFS and topics that are not relying on inputs from RAN3/SA3/CT1

Cell reselection and failure handling, handling of subsequent data transmissins (including, how to indicate presence of subsequent data, etc) handling of non-SDT DRBs (including whether to resume or not non-SDT), CP data over SDT, SDT termination and data loss prevention

[R2-2106051](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106051.zip) Untreated proposal from [Post113-e][503] InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104761](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104761.zip) Discussion on RRC-Controlled Small Data Transmission vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104771](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104771.zip) Discussion on common control plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104785](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104785.zip) Control Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104881](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104881.zip) Failure and successful handling for an SDT session Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104882](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104882.zip) CP-SDT remaining open issues Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104981](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104981.zip) Handling of T319-like timer Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104982](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104982.zip) RAN paging reception and response during SDT Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103198](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103198.zip)

[R2-2105100](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105100.zip) Power Saving for SDT Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105101](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105101.zip) Control plane aspects on the SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105102](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105102.zip) Subsequent data transmission for SDT Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105281](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105281.zip) Consideration on CP issues CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105377](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105377.zip) Beam management in SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103455](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103455.zip)

[R2-2105448](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105448.zip) Control plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105575](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105575.zip) Control plane common aspects for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105691](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105691.zip) Discussion on subsequent SDT in NR, timer handling, and support for SRB1/2 Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105720](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105720.zip) Discussion on the support of the RRC-less SDT Xiaomi Communications, Intel Corporation, ASUSTeK, Fujitsu, MediaTek, Apple, Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2104221](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104221.zip)

[R2-2105721](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105721.zip) Technical details of the RRC-less SDT Xiaomi Communications, ASUSTeK, Fujitsu, Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2104222](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104222.zip)

[R2-2105810](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105810.zip) Consideration on CP issues for small data transmission Lenovo, Motorola Mobility discussion Rel-17

[R2-2105885](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105885.zip) Discussion on open issues of SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103431](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103431.zip)

[R2-2105911](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105911.zip) SDT control plane aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2105928](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105928.zip) Control plane common aspects of SDT ZTE Corporation, Sanechips discussion Rel-17

[R2-2106040](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106040.zip) SDT cell re-selection Convida Wireless other Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106050](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106050.zip) SDT CP and configuration aspects InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106132](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106132.zip) Discussion on CP aspects of SDT China Telecomunication Corp. discussion

[R2-2106217](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106217.zip) Beam selection and indication for subsequent SDT ETRI discussion

[R2-2106255](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106255.zip) Handling of non-SDT data arriving CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.4 Aspects specific to RACH based schemes

Including email discussion on [Post114][507]

RA resource configuration and selection, PDCCH monitoring after successful SDT RA completion, RAN2 specific details of context fetch/data forwarding with and without anchor relocation

[R2-2104762](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104762.zip) Report of [Post113bis-e][507][SDT] Resource Configuration Aspects vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

=> Revised in [R2-2106443](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106443.zip)

[R2-2106443](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-21064434762.zip) Report of [Post113bis-e][507][SDT] Resource Configuration Aspects vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2104763](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-21047636443.zip) Supporting Small Data Transmission via RA Procedure vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104772](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104772.zip) Discussion on RACH-based SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104786](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104786.zip) Details of RACH bsaed Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104883](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104883.zip) RA-SDT remaining open issues Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104965](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104965.zip) PDCCH monitoring in RA-based SDT procedure Asia Pacific Telecom, FGI discussion

[R2-2105378](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105378.zip) Discussion on PDCCH monitoring for RA-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105549](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105549.zip) Discussion on RACH-based SDT Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105574](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105574.zip) Small data transmission with RA-based schemes Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105692](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105692.zip) Discussion on context fetch and anchor relocation Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103580](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103580.zip)

[R2-2105693](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105693.zip) RACH-based SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105758](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105758.zip) RACH based SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105878](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105878.zip) Details of RACH specific schemes Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105886](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105886.zip) Discussion on open issues for RACH based SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103433](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103433.zip)

[R2-2105929](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105929.zip) Open issues for RACH based SDT ZTE Corporation, Sanechips discussion Rel-17

[R2-2106131](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106131.zip) Considerations on Open issues in RA-SDT China Telecomunication Corp. discussion

[R2-2106256](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106256.zip) Anchor relocation and context fetch CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.5 Aspects specific to CG based schemes

This AI will NOT be treated in RAN2#114

NOTE: expected input: paper containing the remaining proposals not discussed as part of [Post113-e][504] from rapporteur to be treated.

Contributions can be submitted but not required and should focus only on new highly critical open issues and resolving the FFSs

CG resources, configuration and selection, validity of CG resources, multiple CG configurations, handling of beam selection for CG (including association between CGs and SSBs) etc, any other aspects included in [Post113-e][504][SDT] which cannot be concluded as part of the email

[R2-2105031](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105031.zip) Remaining untreated proposals from [POST113-e][504][SDT] CG Open Issues Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104787](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104787.zip) Details of Configured Grant based Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104968](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104968.zip) Beam selection and failure handling for CG-SDT Asia Pacific Telecom, FGI discussion

[R2-2104983](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104983.zip) PDCCH monitoring after SDT-TAT expiry Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2003199](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2003199.zip)

[R2-2105282](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105282.zip) Analysis and views on CG-SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105379](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105379.zip) Beam selection for CG-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103457](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103457.zip)

[R2-2105465](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105465.zip) Aspects specific to CG based SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105576](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105576.zip) Small data transmission with CG-based scheme Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105598](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105598.zip) Discussion on CG-SDT open issues LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105694](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105694.zip) CG-based SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103581](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103581.zip)

[R2-2105722](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105722.zip) Remaining issues of CG SDT Xiaomi Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2104223](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2104223.zip)

[R2-2105759](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105759.zip) Details of CG based SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105811](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105811.zip) Consideration on CG based small data transmission Lenovo, Motorola Mobility discussion Rel-17

[R2-2105887](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105887.zip) Discussion on open issues for CG based SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2103434](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2103434.zip)

[R2-2105930](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2105930.zip) Open issues for CG based SDT ZTE Corporation, Sanechips discussion Rel-17

[R2-2106012](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106012.zip) Discussion on CG-SDT Request by UE NEC Telecom MODUS Ltd. discussion

[R2-2106042](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_114-e%5CDocs%5CR2-2106042.zip) CG-based SDT selection and configuration InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core