3GPP TSG-RAN WG2 Meeting #115 electronic [R2-2108834](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108834.zip)

Online, August, 2021

Source: Session Chair (InterDigital)

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

**Email discussions:**

* [AT115e][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
* [AT115e][501][Sdata] Summary of UP (LG)

Thursday night inputs by all companies, Friday proposals by rapporteur, Monday comments on final proposals

* [AT1145e][502][Sdata] Summary of RA aspects (Vivo)

Thursday night inputs by all companies, Friday proposals by rapporteur, Monday comments on final proposals

# 8 Rel-17 NR Work Items

## 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 including [Post114-e][509][URLLC/IIoT] Running Stage 2 CR review (Nokia)

[R2-2108019](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108019.zip) Summary of Email Discussion [Post114-e][509][URLLC/IIoT] Running Stage 2 CR review (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2108020](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108020.zip) Stage-2 Running CR for Rel-17 IIoT/URLLC Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.6.0 0383 - B NR\_IIOT\_URLLC\_enh

### 8.5.2 Enhancements for support of time synchronization

Including email discussion [Post114-e][512][URLLC/IIoT] T-synch open issues (Intel)

RAN1 progress if any should be taken into account. 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.

[R2-2108296](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108296.zip) Report of email discussion [Post114-e][512][URLLC/IIoT] T-synch open issues (Intel) Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107116](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107116.zip) Triggered Synchronization Activation CANON Research Centre France discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core Late

[R2-2107152](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107152.zip) Discussion about time synchronization enhancements Huawei, HiSilicon discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107528](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107528.zip) RE: LS on Time Synchronization IEEE 1588 WG LS in To:RAN, SA Cc:RAN2

[R2-2107556](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107556.zip) Propagation Delay Compensation for TSN Qualcomm Incorporated discussion Rel-17

[R2-2107736](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107736.zip) Consideration on the support of time synchronization enhancement OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107741](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107741.zip) Remaining issues on time synchronization and PDC ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107800](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107800.zip) Discussion on propagation delay compensation vivo discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107897](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107897.zip) Left issues for propagation delay compensation Lenovo, Motorola Mobility discussion Rel-17

[R2-2108021](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108021.zip) Time Synchronization Signalling Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2108097](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108097.zip) Summary of PDC Issues Ericsson discussion

[R2-2108168](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108168.zip) Discussion on RAN enhancement to support propagation delay compensation China Telecommunications discussion Rel-17

[R2-2108258](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108258.zip) Issues on Propagation Delay Compensation Samsung discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108436](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108436.zip) Leftover aspects on Timing Synchronization Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108547](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108547.zip) Support of time synchronization for TSN based on RAN1 progress CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108553](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108553.zip) Discussion on enhancements for support of time synchronization LG Electronics Inc. discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core [R2-2106433](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106433.zip)

[R2-2108793](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108793.zip) Discussion on the PDC support for IDLE or CONNECTED Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108803](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108803.zip) Timing synchronization for UE in RRC\_INACTIVE state and RRC\_IDLE state TCL Communication Ltd. discussion Rel-17 NR\_IIOT\_URLLC\_enh [R2-2106324](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106324.zip)

[R2-2108815](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108815.zip) Discussion on uplink time synchronization for TSN NTT DOCOMO, INC. discussion Rel-17 [R2-2100781](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2100781.zip)

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

Including [Post114-e][510][URLLC/IIoT] Open issues for UCE

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.

[R2-2108231](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108231.zip) Summary of [Post114-e][510][URLLC/IIoT] Open issues for UCE MediaTek Inc. discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core Late

[R2-2107153](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107153.zip) Remaining issues about Uplink enhancements for URLLC in UCE Huawei, HiSilicon discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107201](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107201.zip) Sequential processing of autonomous retransmission and lch-based prioritization CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2107202](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107202.zip) Time-based HPID for gNB-scheduled dynamic retransmissions CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2107557](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107557.zip) CG Harmonization for Unlicensed Controlled Environment Qualcomm Incorporated discussion Rel-17

[R2-2107737](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107737.zip) Consideration on URLLC over NR-U OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107801](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107801.zip) Remaining issues about autonomous re-transmission vivo discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107896](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107896.zip) Further details on enhancements for URLLC in UCE Lenovo, Motorola Mobility discussion Rel-17

[R2-2108022](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108022.zip) Remaining Issues of URLLC in NR-Unlicensed Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2108098](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108098.zip) Harmonizing UL CG enhancements in NR-U and URLLC Ericsson discussion

[R2-2108270](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108270.zip) Further Consideration On the URLLC transmission in UCE ZTE Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108667](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108667.zip) IIoT operation in unlicensed controlled environment InterDigital discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108674](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108674.zip) Uplink enhancements for URLLC in unlicensed controlled environments Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108748](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108748.zip) Remaining issues of harmonizing UL CG enhancements for IIoT in UCE III discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2108758](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108758.zip) Issues on Prioritization in UCE Samsung discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108794](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108794.zip) Remaining issues of CG harmonization Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core [R2-2105724](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105724.zip)

[R2-2108810](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108810.zip) Retransmission of UCI-only MAC PDU LG Electronics UK discussion NR\_IIOT\_URLLC\_enh-Core

### 8.5.4 RAN enhancements based on new QoS

Including [Post114-e][511][URLLC/IIoT] QoS Solutions (Samsung)

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 taken into account SA2 progress

[R2-2107173](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107173.zip) Report from email discussion [Post114-e][511][URLLC/IIoT] QoS Solutions (Samsung) Samsung Electronics GmbH report

[R2-2107154](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107154.zip) Discussion on two-level PERs for survival time handling Huawei, HiSilicon discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107174](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107174.zip) Entering, operating in, and exiting the Survival Time state Samsung Electronics GmbH discussion

[R2-2107203](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107203.zip) UE-based reactive solution for survival time CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2107558](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107558.zip) RAN Enhancement to support Survival Time QUALCOMM Europe Inc. - Italy discussion Rel-17

[R2-2107611](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107611.zip) Reliability enhancements for CG/SPS Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107612](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107612.zip) Further considerations on survival time for new QoS Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107658](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107658.zip) L1/L2 configuration adaptation Fujitsu discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107738](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107738.zip) Consideration on RAN enhancement based on new QoS OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107742](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107742.zip) Remaining issues on enhanced QoS ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107802](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107802.zip) Consideration on reactive solution for survival time vivo discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107806](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107806.zip) Further discussions on RAN enhancements based on Survival Time III discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2107895](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107895.zip) Discuss on the mechanism to guarantee the survival time Lenovo, Motorola Mobility discussion Rel-17

[R2-2108023](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108023.zip) Analysis of Potential RAN Enhancements for Survival Time Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2108099](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108099.zip) RAN enhancements based on new QoS related parameters Ericsson discussion

[R2-2108169](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108169.zip) Discussion on RAN enhancement to support new QoS China Telecommunications discussion Rel-17

[R2-2108435](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108435.zip) UE-based Survival time handling Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108457](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108457.zip) ST handling with alternating CC allocations Sequans Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108459](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108459.zip) Discussion on avoiding prematurely entering Survival Time state Futurewei Technologies discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108516](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108516.zip) Discussion on the RAN support for new QoS parameters CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2108666](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108666.zip) Enhancements based on new QoS requirements InterDigital discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2108786](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108786.zip) Progress of QoS LG Electronics UK discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2108795](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108795.zip) Clarification on the survival time requirement Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core [R2-2105725](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105725.zip)

## 8.6 Small Data enhancements

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

Time budget: 1.5 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 5 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)

Including [Post114-e][504][SData] Running Stage 2 CR review (Nokia), [Post114-e][505][SData] RRC/MAC modeling and RRC running CR (ZTE), and [Post114-e][506][SData] Running MAC CR (Huawei)

[R2-2106923](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106923.zip) LS on the physical layer aspects of small data transmission (R1-2106335; contact: ZTE) RAN1 LS in Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN2

[R2-2106931](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106931.zip) Reply LS on small data transmission (R3-212820; contact: Ericsson) RAN3 LS in Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN2

[R2-2108242](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108242.zip) Stage-2 running CR Introduction of SDT Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.6.0 0357 2 B NR\_SmallData\_INACTIVE-Core [R2-2105877](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105877.zip)

[R2-2107486](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107486.zip) Summary: [Post114-e][505][SData] RRC/MAC modeling and RRC running CR (ZTE) ZTE Corporation (Rapporteur) report

[R2-2107496](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107496.zip) Summary of [Post114-e][506][SData] Running MAC CR (Huawei) Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2107478](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107478.zip) RRC Running CR for SDT ZTE Corporation (rapporteur) draftCR Rel-17 38.331 16.5.0 B NR\_SmallData\_INACTIVE-Core [R2-2105927](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105927.zip)

[R2-2107494](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107494.zip) Running MAC CR for small data Huawei, HiSilicon draftCR Rel-17 38.321 16.5.0 B NR\_SmallData\_INACTIVE-Core Late

[R2-2107495](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107495.zip) Remaining issue for MAC spec Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

### 8.6.2 User plane common aspects

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

[R2-2108729](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108729.zip) Remaining untreated proposals from [AT113bis-e][501] UP SDT open issues LG Electronics Inc. (Rapporteur) report Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2106310](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106310.zip)

Proposal 2: RAN2 discuss further whether the UE can implicitly disable PDCP status report when the UE initiates SDT procedure. (13/14)

Proposal 5: RAN2 discuss further whether the RLC failure handling should be supported for SDT. (11/13)

Proposal 6: Data volume used for SDT selection criteria is calculated as the total sum of Buffer Size across SDT RBs. (15/2/5/5)

Proposal 8: RAN2 discuss further whether and how the LCH restriction is used for SDT (12/12/12).

Proposal 11: Whether to support BFD and BFR for SDT is up to RAN1 decision.

[R2-2109039](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2109039.zip)

[R2-2107002](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107002.zip) User Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107053](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107053.zip) Further Discussion on User Plane Aspect for Small Data Transmission vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2104760](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2104760.zip)

[R2-2107055](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107055.zip) Handling of non-SDT Data Arrival vivo discussion NR\_SmallData\_INACTIVE-Core

[R2-2107245](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107245.zip) Discussion on the remianing issues of SDT modelling OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107246](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107246.zip) Discussion on user plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107295](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107295.zip) User Plane leftover issues on SDT mechanism Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107464](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107464.zip) Switching during a SDT procedure FGI, Asia Pacific Telecom discussion

[R2-2107487](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107487.zip) Common aspects for UP for SDT ZTE Corporation, Sanechips discussion

[R2-2107778](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107778.zip) User plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107844](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107844.zip) User plane aspects of small data transmission InterDigital, Europe, Ltd. discussion Rel-17

[R2-2107898](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107898.zip) The UP common issues for small data transmissions Lenovo, Motorola Mobility discussion Rel-17

[R2-2107991](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107991.zip) UP common aspects of SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108055](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108055.zip) User Plane aspects of SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2105690](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105690.zip)

[R2-2108087](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108087.zip) Common aspects for SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108200](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108200.zip) User plane common aspects for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108508](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108508.zip) UP common issues of SDT CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108680](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108680.zip) Consideration on PDCP protocol in SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108681](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108681.zip) Consideration on UP common aspects of SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108710](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108710.zip) BSR and PHR for SDT procedure ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108730](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108730.zip) Remaining UP issues in SDT LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2106311](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106311.zip)

[R2-2108788](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108788.zip) Discussion on the data volume computation Xiaomi Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108789](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108789.zip) Handling of MAC CE Xiaomi Communications 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

Including [Post114-e][507][SData] Non-SDT data arrival handling (Intel)

[R2-2107292](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107292.zip) Report of email discussion [Post114-e][507][SData] Non-SDT data arrival handling Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

**General topics on the switch from SDT to CONNECTED**

Proposal 1. [To agree] [14/16] No new solution is defined to prevent data loss or duplication for the scenario where the anchor relocation is required in the middle of an SDT session, i.e. network can rely on releasing the UE back into RRC\_INACTIVE.

Proposal 3. [To agree] [13/16] [option 2.c)] The PDCP entities of only the non-SDT RBs are re-established (i.e. not for the SDT RBs) unless any new security keys are derived during the switch from SDT to CONNECTED (i.e. when UE receives RRCResume message during an SDT session). Current signalling (e.g. resume) can be used by the network to re-establish these PDCP entities as required.

**Failure handling during ongoing SDT session**

Proposal 16. [To agree] Events that trigger a termination or failure of an ongoing SDT session: [12/16] [event 1)] cell reselection, [12/16] [event 2)] expiry of the SDT failure detection timer and [10/16] [event 4)] Maximum number of retransmissions is reached in RLC

Proposal 17. [To agree] [13/16] The aim is to define a common UE behaviour, if possible, when any of the agreed trigger events from Proposal 16 lead to an abrupt termination/failure of an SDT session.

Proposal 21. [To agree] [15/16] [Approach 1)] When a UE detects a failure of an ongoing SDT session, UE transitions autonomously into RRC\_IDLE (as baseline solution).

**Non-SDT data handling during ongoing SDT session**

Proposal 19. [To discuss] The mechanism to switch UE into CONNECTED when non-SDT data is detected during an ongoing SDT session meets the following principles:

Proposal 19.1. [Principle 1] PDCP COUNT is not reset. Note: Principle 1 is applicable to DCCH-based approach and related to the topics discussed in Proposal 6 / Proposal 8 for CCCH-based approach.

Proposal 19.2. [Principle 2] No new security key is derivated i.e. UE continues to use the security keys generated after the 1st RRCResumeRequest. Note: Principle 2 is applicable to DCCH-based approach and related to the topics discussed in Proposal 7 / Proposal 8 for CCCH-based approach.

Proposal 20. [To discuss] Discuss preferred approach to switch into CONNECTED upon non-SDT is detected during an ongoing SDT session considering [7/16] via CCCH-based approach (with related technical details summarized in Proposal 4 to Proposal 11’) or [10/16] via DCCH-based approach (with related technical details summarized in Proposal 11 to Proposal 15).

[R2-2108665](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108665.zip) Untreated proposal from [Post113-e][503] InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2106051](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106051.zip)

[R2-2107003](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107003.zip) Control Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107054](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107054.zip) Discussion on RRC-Controlled Small Data Transmission vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2104761](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2104761.zip)

[R2-2107247](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107247.zip) Discussion on control plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107293](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107293.zip) Control Plane leftover issues on SDT mechanism Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107294](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107294.zip) Expected duration and applicable features for SDT procedure Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107463](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107463.zip) Issues of the Subsequent Data Transmission FGI, Asia Pacific Telecom discussion

[R2-2107488](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107488.zip) Common aspects for CP for SDT ZTE Corporation, Sanechips discussion

[R2-2107491](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107491.zip) Control plane common aspects for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107493](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107493.zip) Discussion on the NAS aspects of Small Data Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107580](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107580.zip) Power Saving for SDT Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107581](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107581.zip) Non-SDT handling during the SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107582](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107582.zip) Control plane aspects on the SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107659](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107659.zip) Handling of SDTF detection timer Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2104981](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2104981.zip)

[R2-2107660](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107660.zip) RAN paging reception and response during SDT 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_115-e%5CDocs%5CR2-2104982.zip)

[R2-2107779](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107779.zip) Control plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107866](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107866.zip) Consideration on switching to non-SDT procedure LG Electronics Inc. discussion NR\_SmallData\_INACTIVE-Core

[R2-2107868](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107868.zip) Consideration on security issue on CCCH-based approach LG Electronics Inc. discussion NR\_SmallData\_INACTIVE-Core

[R2-2107899](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107899.zip) Discussion on CP data transmission over SDT Lenovo, Motorola Mobility discussion Rel-17

[R2-2107992](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107992.zip) CP common aspects of SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2105885](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105885.zip)

[R2-2108006](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108006.zip) Discussion on some FFSes Potevio Company Limited discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108009](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108009.zip) Paging reception during SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core Revised

[R2-2108056](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108056.zip) Discussion on subsequent SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108088](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108088.zip) SDT Faliure Handling Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108089](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108089.zip) CP aspects for SDT Ericsson discussion

[R2-2108261](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108261.zip) SDT control plane aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2108262](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108262.zip) RRC procedure for SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2108327](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108327.zip) SDT cell re-selection Convida Wireless other Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2106040](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106040.zip)

[R2-2108506](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108506.zip) Consideration on control plane issues CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108591](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108591.zip) Paging reception during SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2108009](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108009.zip)

[R2-2108682](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108682.zip) Consideration on CP issues CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108731](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108731.zip) Non-SDT data arrival handling LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108790](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108790.zip) Paging reception during SDT Xiaomi Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108816](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108816.zip) Handling of abrupt termination for SDT ZTE Wistron Telecom AB discussion Rel-17

### 8.6.4 Aspects specific to RACH based schemes

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

**To be treated second week of meeting**

[R2-2107004](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107004.zip) RACH configuration for Small Data Transmission. Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107005](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107005.zip) Further Details of RACH bsaed Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107056](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107056.zip) Supporting Small Data Transmission via RA Procedure vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2104763](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2104763.zip)

[R2-2107248](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107248.zip) Discussion on RACH-based SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107296](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107296.zip) RACH leftover issues on SDT mechanism Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107354](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107354.zip) Discussion on RACH-based SDT Spreadtrum Communications discussion Rel-17

[R2-2107465](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107465.zip) PDCCH monitoring in RA-SDT FGI, Asia Pacific Telecom discussion

[R2-2107489](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107489.zip) Open issues for RA-SDT ZTE Corporation, Sanechips discussion

[R2-2107583](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107583.zip) RACH specific SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107780](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107780.zip) Aspects specific to RACH based schemes NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107993](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107993.zip) Open issues for RACH based SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2105886](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105886.zip)

[R2-2108057](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108057.zip) Discussion on context fetch and anchor relocation Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2105692](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105692.zip)

[R2-2108058](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108058.zip) RACH-based SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2105693](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105693.zip)

[R2-2108085](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108085.zip) RACH based small data transmission Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108199](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108199.zip) Small data transmission with RA-based schemes Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108243](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108243.zip) Details of RACH specific schemes Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108507](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108507.zip) Discussion on RA-SDT CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108683](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108683.zip) Transition from SDT to RRC\_CONNECTED CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108702](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108702.zip) Discussion on RA-based small data transmission Google Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2108711](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108711.zip) Discussion on fallback to non-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108712](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108712.zip) Discussion on PDCCH monitoring for RA-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108713](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108713.zip) Discussion on RA configuration reception ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.5 Aspects specific to CG based schemes

Including [Post114-e][508][SData] Open issues for CG-SDT (Qualcomm)

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.

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.

[R2-2107930](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107930.zip) Report of [Post114-e][508][SData] Open issues for CG-SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core

**The following proposals may be easily agreeable:**

Proposal 1: If none of the SSBs’ RSRP is above the RSRP threshold of CG-SDT criteria in the type selection phase, UE should select RA-SDT when RA-SDT criteria is met. (18/25)

Proposal 5: MAC PDU rebuilding (if required) can be left to UE implementation when RACH procedure is initiated during the subsequent CG transmission phase. (25/25)

Proposal 9: UE should release CG-SDT resource (if stored) when UE initiates RRC resume procedure from another cell which is different from the cell in which the RRCRelease is received. (25/25)

Proposal 10: The C-RNTI previously configured in RRC\_CONNECTED state is used for UE to monitor PDCCH in CG-SDT (18/25). FFS whether to further check with RAN1.

Proposal 11: CS-RNTI based dynamic retransmission mechanism can be reused for CG-SDT.(21/25)

**The following proposals need further discussion:**

Proposal 2: During the subsequent CG transmission phase, for the purpose of CG resource selection, UE re-evaluates the SSB for every CG transmission. (18/25) FFS the case that UE cannot finish SSB evaluation before next CG occasion.

Proposal 3: During subsequent CG transmission phase, UE can initiate RACH procedure. (22/25) FFS on what conditions.

Proposal 4: If propose 3 is agreed, RAN2 can further discuss whether to take the following conditions for proposal 3 (1) no qualified SSB when the evaluation is performed; (2) when TA is invalid; (3) when SR is triggered due to lack of UL resource.

Proposal 6: A new timer is introduced for UE PDCCH monitoring after CG/DG transmission for CG-SDT. FFS on the detailed behavior of new timer. (18/24)

Proposal 7: If proposal 6 is not agreed, RAN2 further discusses whether to reuse the existing timer from one of the following two options.

(1) drx-RetransmissionTimerUL;

(2) cg-RetransmissionTimer.

Proposal 8: RAN2 should further discuss whether the PDCCH monitoring timer should start after each transmission scheduled by CG or DG. (19/23)

Proposal 12: The parameters in Rel-15 ConfiguredGrantConfig and rrc-ConfiguredUplinkGrant can be reused in the CG-SDT configuration as baseline. (19/24) FFS on whether the parameters of srs-ResourceIndicator, pathlossReferenceIndex and repK are needed or not. FFS on whether NR-U related parameters are need or not. RAN2 can send an LS to check with RAN1 for further input.

Proposal 13: From RAN2 perspective, at least the following parameters should be included in the CG-SDT configuration. (21/24) FFS whether these parameters are common for multiple CG-SDT configurations or per CG-SDT configuration.

• The new TA timer in RRC\_INACTIVE;

• The RSRP change threshold for TA validation mechanism in SDT;

• The SSB RSRP threshold for beam selection (i.e. UE selects the beam and associated CG resource for data transmission).

Proposal 14: RAN2 can send an LS to ask RAN1 for further input on the CG parameters for CG-SDT.

[R2-2107006](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107006.zip) Details of Configured Grant based Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107057](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107057.zip) Supporting Small Data Transmission via CG PUSCH vivo discussion NR\_SmallData\_INACTIVE-Core

[R2-2107249](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107249.zip) Discussion on CG-based SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107297](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107297.zip) CG-SDT leftover aspects Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107440](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107440.zip) Discussion on CG-SDT Request by UE NEC Telecom MODUS Ltd. discussion [R2-2106012](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2106012.zip)

[R2-2107490](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107490.zip) Open issues for CG-SDT ZTE Corporation, Sanechips discussion

[R2-2107492](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107492.zip) CG-based schemes for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107584](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107584.zip) CG specific SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2107661](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107661.zip) PDCCH monitoring and SDT-TAT Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2004983](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2004983.zip)

[R2-2107788](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107788.zip) Discussion on beam selection aspect for CG-SDT PANASONIC R&D Center Germany discussion

[R2-2107850](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107850.zip) CG-based SDT selection and configuration InterDigital, Europe, Ltd. discussion Rel-17

[R2-2107867](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107867.zip) Consideration on open issues of CG-SDT LG Electronics Inc. discussion NR\_SmallData\_INACTIVE-Core

[R2-2107900](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107900.zip) Consideration on CG based small data transmission Lenovo, Motorola Mobility discussion Rel-17

[R2-2107994](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107994.zip) Open issues for CG based SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108010](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108010.zip) Aspects specific to CG based SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2108059](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108059.zip) CG-based SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core [R2-2105694](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2105694.zip)

[R2-2108086](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108086.zip) Details of CG based SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108509](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108509.zip) Consideration on CG-SDT CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108630](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108630.zip) Discussion on CG small data transmission Google Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108684](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108684.zip) Analysis and views on CG-SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108714](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108714.zip) Discussion on CS-RNTI for CG-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108791](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108791.zip) RACH failure in subsequent data transmission phase Xiaomi Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2108792](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108792.zip) Remaining issues of CG SDT in RAN2 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_115-e%5CDocs%5CR2-2104223.zip)

## 8.18 RACH indication and partitioning

Time budget: Equivalent to 0.5-1 TU

Tdoc Limitation: 1 tdocs

Expected to cover WIs SDT, CovEnh, RedCap, RAN slicing .. Initial discussion on what should be treated in common and what design could be common.

[R2-2108253](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108253.zip) RACH partitioning for Rel-17 features Ericsson discussion Rel-17

[R2-2107009](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107009.zip) Common aspects of RACH Samsung Electronics Co., Ltd discussion Rel-17 NR\_cov\_enh-Core, NR\_SmallData\_INACTIVE-Core, NR\_slice-Core

[R2-2107219](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107219.zip) Unified RACH indication and partitioning Qualcomm Incorporated discussion Rel-17

[R2-2107484](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107484.zip) RRC and MAC related aspects of common RACH configuration ZTE Corporation, Sanechips discussion

[R2-2107058](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107058.zip) Discussion on RACH Partitioning in Rel-17 vivo discussion NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh, NR\_redcap-Core, NR\_slice-Core

[R2-2107244](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107244.zip) RACH partitioning common design for Rel-17 features Beijing Xiaomi Software Tech discussion Rel-17

[R2-2107256](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107256.zip) Discussion on PRACH partitioning OPPO discussion Rel-17

[R2-2107552](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107552.zip) Common aspects of RACH partitioning Intel Corporation discussion Rel-17 NR\_cov\_enh-Core, NR\_slice-Core, NR\_SmallData\_INACTIVE-Core

[R2-2107575](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107575.zip) Cross-WI RACH Design Apple discussion Rel-17 NR\_cov\_enh-Core, NR\_slice-Core, NR\_SmallData\_INACTIVE-Core, NR\_redcap-Core

[R2-2107835](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2107835.zip) RACH indication and partitioning InterDigital, Europe, Ltd. discussion Rel-17

[R2-2108004](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108004.zip) On RACH indication and partitioning CATT discussion Rel-17 NR\_cov\_enh-Core, NR\_slice-Core, NR\_SmallData\_INACTIVE-Core, NR\_redcap-Core

[R2-2108138](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108138.zip) General aspects of RACH indication and partitioning NEC discussion Rel-17 NR\_redcap-Core, NR\_cov\_enh-Core, NR\_SmallData\_INACTIVE-Core, NR\_slice-Core

[R2-2108210](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108210.zip) RACH indication and partitioning Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_slice-Core, NR\_redcap-Core, NR\_cov\_enh-Core

[R2-2108760](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108760.zip) Discussion on RACH partitioning in Rel-17 LG electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_slice-Core, NR\_redcap-Core, NR\_cov\_enh-Core

# 10Breakout session reports

No documents shall be submitted to this AI or its sub-AIs. It is only for at-meeting-generated contents.

Breakout session reports will be approved by email.

## 10.1 Session on LTE legacy, Mobility, DCCA, Multi-SIM and RAN slicing

[R2-2108831](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108831.zip) Report on LTE legacy, 71 GHz, DCCA, Multi-SIM and RAN slicing Report Vice Chairman (Nokia)

## 10.2 Session on R17 NTN and RedCap

[R2-2108832](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108832.zip) Report from Break-out session on R17 NTN, REDCAP and CE Report Vice Chairman (ZTE)

## 10.3 Session on eMTC

[R2-2108833](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108833.zip) Report eMTC breakout session Report Session chair (Ericsson)

## 10.4 Session on R17 Small data and URLLC/IIOT

[R2-2108834](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108834.zip) Report for Rel-17 Small data and URLLC/IIoT Report Session chair (InterDigital)

## 10.5 Session on positioning and sidelink relay

[R2-2108835](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108835.zip) Report from session on positioning and sidelink relay Report Session chair (MediaTek)

## 10.6 Session on SON/MDT

[R2-2108836](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108836.zip) Report from SON/MDT session Report Session chair (CMCC

## 10.7 Session on NB-IoT

[R2-2108837](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108837.zip) Report NB-IoT breakout session Report Session chair (Huawei)

## 10.8 Session on LTE V2X and NR SL

[R2-2108838](file:///C%3A%5CUsers%5Cpanidx%5COneDrive%20-%20InterDigital%20Communications%2C%20Inc%5CDocuments%5C3GPP%20RAN%5CTSGR2_115-e%5CDocs%5CR2-2108838.zip) Report from session on LTE V2X and NR SL Report Session chair (Samsung)