**3GPP TSG-RAN2 Meeting #117- e R2-22xxxxx**

**e-Meeting, xxx, 2022**

**Source: email discussion Rapporteur (ZTE Corporation)**

**Title: CP open issues list for SDT (email: [POST116bis-e][511])**

**Agenda item:** **xxx**

**Document for:** **Discussion and Decision**

# Introduction

This document contains summary of open issues and proposed resolutions for CP aspects of SDT:

* [POST116bis-e][511][Sdata] CP open issues (ZTE)

Scope:

- List of critical open issues to be resolved for WI completion (including UE capabilities)

- Updated CR 38.331 for information and review

NOTE: NO contributions on these critical open issues are expected

Deadline:

- Open issues list Jan. 28th

- Company inputs Feb. 15th

Proposed format for comments is as below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Description | Criticality(Essential / Optional / Enhancement)  | Company comments/PreferenceCompanies can use company ID and enter comment (see example) | Proposed resolution (to be updated by Rapporteur) |
| Zxxx | XXX is missing/wrong/open etc | Essential | ZTE: We think this is not neededXXX: We agree with YYY etc | Rapp: Will be implemented in the next revision |

# Discussion

## Procedural open issues

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Description | Criticality(Essential / Optional / Enhancement)  | Company comments/Preference | Proposed resolution (to be updated by Rapporteur) |
| Z001 | Field descriptions missing for some IEs | Essential |  | Rapp: Will be implemented in the next revision |
| Z002 | Running CR is not against the latest RRC spec version  | Essential |  | Rapp: Will be updated in the next revision |
| Z013 | Align the parameter names between MAC and RRC specs | Essential |  | Rapp: To be done before/during next meeting |
| Z019 | SDT specific RACH configuration is missing | Essential |  | Rapp: This will be part of the common RACH partitioning CR and hence all SDT related agreements (both in RAN2 and RAN1 – see the L1 params for SDT) would have to be included in that CR.  |

## UE capabilities

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| --- | --- | --- | --- | --- |
| # | Description | Criticality(Essential / Optional / Enhancement)  | Company comments/Preference | Proposed resolution (to be updated by Rapporteur) |
| Z003 | To support Rel-17 SDT mechanism, whether UE shall always support RA-SDT (i.e. a UE supporting CG-SDT shall also support RA-SDT) | Essential |  |  |
| Z004 | whether to define a new UE capability for RA-SDT as ‘optional with capability signalling’, per UE and without a need of xDD and FRx differentiation | Essential |  |  |
| Z005 | whether To define a new UE capability for CG-SDT as ‘optional with capability signalling’, per UE and without a need of xDD and FRx differentiation | Essential |  |  |
| Z006 | Any pre-Rel-17 features (e.g. 2-step RACH or SUL) requires additional/separate UE capabilities when used in combination to Rel-17 SDT mechanism | Essential |  |  |
| Z007 | Whether to indicate bandwidth, and the supported MIMO layers within UE´s capabilities related to SDT | Essential |  |  |
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## CP/RRC open issues

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| --- | --- | --- | --- | --- |
| # | Description | Criticality(Essential / Optional / Enhancement)  | Company comments/Preference | Proposed resolution (to be updated by Rapporteur) |
| Z009 | Editor’s Note: FFS on SDT TAT and its interaction with the normal TAT and a separate section to capture the release of CG-SDT resources upon receiving such request from lower layers | Essential | Rapp: Seems we made a few more agreements on this. Wait for the MAC spec to be finalized and then we can capture corresponding procedure in RRC if needed.  |  |
| Z010 | TBD whether the expiry of the new SDT timer related actions can be integrated into section 5.3.13.5 or not | Essential | Rapp: Propose to integrate as currently in the running CR (i.e. remove the EN in 5.3.13.5) |  |
| Z011 | How to suppress RNAU whilst SDT is ongoing? | Essential | Rapp: Propose to add a condition that RNAU is only initiated if neither T319 nor Txxx are running (see running CR – section 5.3.13.8). Alternative is to add a note to capture this. Both can work – comments welcome. |  |
| Z012 | RRCReject handling | Essential | Rapp: Propose to follow same procedure as legacy (which is also the case in EDT).  |  |
| Z014 | Is Logged measurement procedure (5.5a) applicable during SDT | Optimisation | Rapp: Propose to not support this |  |
| Z015 | Are Idle/inactive measurements continued during SDT (5.7.8) | Optimisation | Rapp: Propose to not support this  |  |
| Z016 | What are the values for sdt-DataVolumeThreshold | Essential |  |  |
| Z017 | What are the values for txxx (newSDTTimer) | Essential |  |  |
| Z018 | Should DataVolumeThreshold be also configured in SIB1? Should this be only configured in SIB1 and not in RRCRelease? | Optimisation | Rapp: Think UE specific signalling (in RRCRelease) is sufficient.  |  |
| Z020 | sdt-SSB-PerCG-PUSCH-r17 ENUMERATED {one, two, four, eight,sixteen} FFS from RAN1 on {1/8,1/4,1/2}  | Essential |  | Rapp: wait for RAN1 input |
| Z021 | Configuration of common search space for SDT is open | Essential |  | Rapp: This shold be part of common RACH partitioning CR.  |
| Z023 | Do we need to discard PDCP SDUs upon reception of RRCRelease with SDT config? | Essential |  |  |
| Z024 | How to support delta signalling for CG-SDT?Option 1: Delta signalling is based on configuration in BWP-dedicated for initial BWO in connected modeOption 2: Delta signalling is based on the previous SDT configuration (i.e. only applicable to SDT operation and will be released when the UE moves to connected)If we want to support option 1, we need to clarify the relation between the configuration in connected mode and the configuration in SDT for the CG type 1 resources. (e.g. are the CG type 1 resources in SDT valid also in connected? Will the PDCCH/PDSCH configuration impact the connected mode configuration? Etc. this also needs to be clarified in case of cell change. It seems option 2 is simpler. Companies can comment.  | Essential |  |  |
| Z025 | In case of SDT, carrier selection is performed before selecting the CG resource. For this, we use *sdt-RSRP-ThresholdSSB-SUL.* However, it is unclear how this IE is configured. Is it configured commonly to all RACH partitions? Or is it configured separately for SDT (e.g. in SDT-ConfigCommonSIB)? If it is configured separately for SDT, then the carrier should be selected before SDT is initiated and the selected carrier should be informed to MAC (e.g. for RACH partition selection). * Note this may be some how related to RACH partition discussion too.
 | Essential |  |  |
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# Conclusion and proposals

# References

1. R2-2201664, Report for Rel-17 Small data, URLLC/IIoT and RACH partitioning

# Annex (contact details for email discussions)

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| Company | Contact name | Contact email |
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