**3GPP TSG-RAN2 Meeting #118-eR2-2206712**

**Electronic, 9th – 20th May, 2022**

**Source: Email discussion Rapporteur (Huawei, HiSilicon)**

**Title: Summary for [Post118-e][502] UP open issues and CR to 38.321 (Huawei)**

**Agenda item:** **6.6.2**

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

# General

This document contains the list of comments made during the review of the MAC CR for SDT

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### Comments

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| Companies | Brief description of the issue | Suggested resolution/company comments | Proposed way forward by rapporteur |
| LG01 | 5.2  3> when the Contention Resolution is considered successful for Random Access procedure when the CG-SDT procedure is ongoing:  Double “when” is misleading | Change the second “when” to “while”.  3> when the Contention Resolution is considered successful for Random Access procedure while the CG-SDT procedure is ongoing: |  |
| LG02 | 5.2  1> when instruction from the upper layer has been received for indicating the expiry of the *cg-SDT-TimeAlignmentTimer*:  The text is not aligned with RRC text.  instruct the MAC entity to stop the *cg-SDT-TimeAlignmentTimer*, if it is running; | Align the text between RRC and MAC. Either using “expiring” or “stopping”.  If we choose to keep the RRC text, the MAC spec should keep the original text, i.e. “stopping”. |  |
| LG03 | 5.8.2  1> if, after initial transmission for CG-SDT with CCCH message has been performed according to clause 5.4.1, PDCCH addressed to the MAC entity's C-RNTI has not been received, and the SSB corresponding to the configured UL grant has the same SSB index as the SSB selected for initial transmission for CG-SDT with CCCH message (i.e., retransmission of initial transmission of CG-SDT);  3> if this is the initial transmission of CG-SDT with CCCH message after the CG-SDT procedure is initiated as in clause 5.27: (i.e., SSB selection for initial transmission for CG-SDT)  3> else if PDCCH addressed to C-RNTI has been received after the initial transmission of CG-SDT with CCCH message: (i.e., SSB for subsequent new transmission for CG-SDT)  Three highlighted texts are not aligned. | Remove “SSB selection for” from the second text and remove “SSB for” from the third text. |  |
| LG04 | 5.27.2  The MAC entity shall:  1> store the RSRP of the downlink pathloss reference derived based on the *measObject* configured for the Serving Cell as in TS 38.331 [5].  It is not clear when the MAC entity stores the RSRP. | Add the timing when the MAC entity stores the RSRP.  The MAC entity shall, upon reception of configuration for CG-SDT:  1> store the RSRP of the downlink pathloss reference derived based on the *measObject* configured for the Serving Cell as specified in TS 38.331 [5]. |  |
| Samsung001 | 5.27.1 General 2> if CG-SDT is configured on the selected UL carrier, and TA of the configured grant Type 1 resource is valid according to clause 5.27.2; and  2> if, for at least one RB configured for SDT having data available for transmission, *configuredGrantType1Allowed* is configured with value *true* for the corresponding logical channel(s); and  2> if at least one SSB configured for CG-SDT with SS-RSRP above *cg-SDT-RSRP-ThresholdSSB* is available:  3> indicate to the upper layers that the conditions for initiating SDT procedure are fulfilled;  3> perform CG-SDT procedure on the selected UL carrier according to clause 5.8.2.  We do not agree with this change. In our understanding, the intention of the agreement was to use LCH restriction (i.e. configuredGrantType1Allowed or allowedCG-List) for CG-SDT during the LCP procedure. It was not intended for CG-SDT vs RA-SDT selection. | Remove the change  Lenovo: We agree with Samsung  ZTE: We also agree with this comment. Also, the initial sentence about configuredGrantType1Allowed should be updated (please see Z003 below). |  |
| Lenovo001 | As already discussed by email last week, we think that the following RAN2#118e agreement would require some clarifications/changes in TS38.321.  UE doesn’t need to update Bj once being released to RRC\_INACTIVE.  FFS whether a change is needed for SDT and Lenovo can give a TP.    According to the current specifications, UE needs to update Bj also while being in RRC\_INACTIVE and during a SDT procedure. There is a requirement that UE needs to have a up to date value for Bj when LCP is performed. Just to mention, that we actually don’t think that the interpretation/implementation option mentioned by NEC – “T” should be considered as zero at the time of the first update of Bj, e.g. first LCP procedure after initializing Bj to zero – was the intended behaviour at the time when LCP procedure was specified for NR Rel-15. In particular given that the exact moment when UE updates Bj is up to UE implementation (UE doesn’t need to be update Bj at the time when performing LCP) as specified in TS38.321, this would lead to different implementations having a different *Bj* value at the time when a grant is processed by LCP. This seems to be also the understanding of other companies (e.g. R2-2203391, R2-2203186) when the issue was discussed for the SCG activation and deactivation feature.  Even though we don’t consider the issue as critical, we think that RAN2 should be at least clear on what the intended UE behaviour is for SDT. Taking the agreement reached during RAN2#118e it seems that UE also doesn’t need to update Bj during a SDT procedure, e.g. for subsequent SDT initial transmissions.  As commented already by email, we think that a NOTE would be the simplest to clarify the intended UE behaviour, but we don’t have a strong opinion. | [NEC] We wonder if the RAN2 agreement “UE doesn’t need to update Bj once being released to RRC\_INACTIVE.”implies that Bj is not updated (i.e. not increase or decrease, and remains zero) during SDT for SDT-RBs? If so, can the existing LCP procedure work for the transmission of data from SDT-RBs? Our assumption is during SDT, Bj should be able to be updated at least for SDT-RBs as the legacy way. |  |
| Z001 | Clause 5.1.1  1> if the Random Access procedure is not initiated for RA-SDT, as specified in clause 5.27.1:2> if the RSRP of the downlink pathloss reference is less than *rsrp-ThresholdSSB-SUL*:  3> select the SUL carrier for performing Random Access procedure;  3> set the PCMAX to PCMAX,f,c of the SUL carrier.  2> else:  3> select the NUL carrier for performing Random Access procedure;  3> set the PCMAX to PCMAX,f,c of the NUL carrier.  A similar issue was also discussed as part of the RA partitioning and there was no consensus to have this. We propose to keep as it is hence. | Undo the change |  |
| Z002 | 1> when instruction from the upper layer has been received for starting the *TimeAlignmentTimer*:  2> start the *TimeAlignmentTimer* associated with PTAG.  For the above, perhaps we should mention PTAG also in first sentence and may be the RRC should also be aligned with this wording | 1> when instruction from the upper layer has been received for starting the *TimeAlignmentTimer* associated with PTAG:  2> start the *TimeAlignmentTimer* associated with PTAG. |  |
| Z003 | - *cg-SDT-RSRP-ThresholdSSB*: an RSRP threshold configured for SSB selection for CG-SDT.  - *configuredGrantType1Allowed*: indicates whether CG-SDT can be used for transmission for a certain logical channel.  **ZTE comment:**  We think the current LCP procedure is sufficient for this. Even in the case where all DRBs are configured to be not allowed for CG-SDT, then the CCCH message can still be transmitted over the CG-SDT resource if available. So, we think this is not precluded. So, this definition need not be added here. | Remove the change. |  |
| NEC01 | 5.8.2  The following agreement is not reflected:   1. When none of the SSB is above the RSRP threshold for CG-SDT SSB selection, UE triggers legacy SR/RACH when there is UL data available | 1> else if PDCCH addressed to C-RNTI after the initial transmission of the CG-SDT with CCCH message has been received:  2> if at least one RB configured for SDT having data available for transmission:  3~~2~~> initiate Random Access procedure in clause 5.1. |  |