**3GPP TSG-RAN WG2 Meeting #124** **R2-231**

**Chicago, USA, 13th – 17th Nov., 2023**

**Title: Email discussion on the running MAC CR**

**Source: Huawei, HiSilicon**

**Agenda item: 8.2.2**

**Document for: Discussion and Decision**

# Background

The following post meeting email discussion has been planned during RAN2#123bis:

**[Post123bis][409][POS] Rel-18 positioning MAC CRs (Huawei)**

 Scope: Review the running CRs and develop open issue lists.

 Intended outcome: Draft CRs and open issue list for next meeting

 Deadline: Medium (2 weeks)

NOTE that we have the following guidelines from the chair on the running CR email discussions

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| Guidance for all post-meeting discussions on running CRs/open issues (also applicable to AI 7.9.1):* Update the running CR with agreements from the meeting
* Rapporteur to propose resolutions for straightforward open issues which can already be included in the running CR
* Get input on stage-3 issues that require further input from companies to make a decision:
* Focus on stage-3 issues which are better handled via offline, e.g. signaling details, parameter values/ranges, NOT functionality discussion
* For these issues, the discussion rapporteur submits a report with proposals to the next meeting, and input via company Tdocs should be avoided
* Identify the remaining open issues that need to be solved for WI completion in the next meeting
* Company Tdocs for the next meeting should focus on these issues
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This contribution intends to collect the comments on the running MAC CR for the different features in R18 positioning

# 2 Discussion on MAC CR for SL positioning

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| Company+index (e,g, HW000) | Excerpted spec with issues | Comments |
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# 3 Discussion on MAC CR for LPHAP

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| Company+index (e,g, HW000) | Excerpted spec with issues | Comments |
| CATT | 1> when a Timing Advance Command is received in a Random Access Response message for a Serving Cell belonging to a TAG or in a MSGB for an SpCell: | The (re)start condition of srs-ValidityAreaTimeAlignmentTimer may also need to be added when Timing Advance Command is received in a Random Access Response message. |
| CATT | 2> if the UE is configured with SRS with validity area and the upper layer indicates the MAC to update the stored RSRP:3> store the RSRP of the downlink pathloss reference with the current RSRP value of the downlink pathloss reference of the camped cell as in TS 38.331 | The following agreement for TA in the parameter list R1-2310694 from RAN1 need to be reflected in MAC spec.

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| For the determination of UL timing to transmit SRS for positioning by UEs in RRC\_INACTIVE state within the SRS positioning validity area, support the following to determine a valid TA:• The DL reference timing follows the DL timing of current camping cell.• By default, UE maintains the TA from the last serving cell.o UE can adjust its UL timing according to the change in DL reference timing.• If configured by the network, subject to UE capability, UE autonomously adjusts the TA, when cell-reselection happens. |

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| Xiaomi01 | 1> compared to the stored downlink pathloss reference RSRP value, the current RSRP value of the downlink pathloss reference has not increased/decreased by more than *inactivePosSRS-RSRP-ChangeThreshold*, if configured; and1> *inactivePosSRS-TimeAlignmentTimer* is running or *srs-ValidityArea-TimerAlignmentTimer* is running when positioning validity area is configured. | The definition of the current RSRP may be different for Rel-18 SRS with validity area, this should be clarified. |

# 4 Discussion on MAC CR for REDCAP positioning

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| Company+index (e,g, HW000) | Excerpted spec with issues | Comments |
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# 5 Discussion on MAC CR for CA positioning

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| Company+index (e,g, HW000) | Excerpted spec with issues | Comments |
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# 6 Discussion on MAC CR for carrier phase positioning

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| Company+index (e,g, HW000) | Excerpted spec with issues | Comments |
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# 7 Summary

*TBD*

***Proposal1a*:**