**3GPP TSG-RAN WG2 Meeting #123** **R2-230**

**Toulouse , France, 21st Aug– 25th Aug, 2023**

**Title: Summary of  [Post123][414][POS] Rel-18 positioning MAC CRs (Huawei)**

**Source: Huawei, HiSilicon**

**Agenda item: 8.2.1**

**Document for: Discussion and Decision**

# Discussion

## 1.1 MAC CR for sidelink positioning

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

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

NADA

# Annex

## Discussion during R2#123 for MAC CR for LPHAP

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| Company+index  (e,g, HW000) | Excerpted spec with issues | Comments |
| ERIC000 | The MAC entity shall not perform any uplink transmission except the Random Access Preamble and MSGA transmission when the *cg-SDT-TimeAlignmentTimer* is not running during the ongoing CG-SDT procedure as triggered in clause 5.27 and the *inactivePosSRS-TimeAlignmentTimer* or *srs-ValidityAreaTimeAlignmentTimer* is not running | These two timers are not running at the same time, so here should be "and" "are" instead of "or" "is"  [Rapp] Corrected |
| ERIC001 | 2> if there is ongoing Positioning SRS Transmission in RRC\_INACTIVE as in clause 5.26:  3> if SRS positioning validity area is configured:  4> start or restart the *srs-ValidityAreaTimeAlignmentTimer* associated with the indicated TAG.  3> else:  4> start or restart the *inactivePosSRS-TimeAlignmentTimer* associated with the indicated TAG.  2> if CG-SDT procedure is ongoing: | 3> if SRS positioning validity area is configured And UE is in validityArea as determined by upper layers:  We may need above??  [Rapp] agree the previous text is a bit ambiguous. The followig has been chagned  2> if there is ongoing Positioning SRS Transmission in RRC\_INACTIVE as in clause 5.26:  3> if *srs-ValidityAreaTimeAlignmentTimer* is configured:  4> start or restart the *srs-ValidityAreaTimeAlignmentTimer* associated with the indicated TAG.  3> else:  4> start or restart the *inactivePosSRS-TimeAlignmentTimer* associated with the indicated TAG. |
| ZTE001 | 1> when the indication is received from upper layer for stopping the *inactivePosSRS-TimeAlignmentTimer or srs-ValidityArea-TimerAlignmentTimer*:  2> stop the *inactivePosSRS-TimeAlignmentTimer or srs-ValidityArea-TimerAlignmentTimer*.  1> when the indication is received from upper layer for starting the *inactivePosSRS-TimeAlignmentTimer*:  2> start or restart the *inactivePosSRS-TimeAlignmentTimer*.  1> when instruction from the upper layer has been received for starting the *cg-SDT-TimeAlignmentTimer*:  2> start the *cg-SDT-TimeAlignmentTimer*. | Should add   1. when the indication is received from upper layer for starting the *inactivePosSRS-TimeAlignmentTimer or srs-ValidityArea-TimerAlignmentTimer*   2> start or restart the *inactivePosSRS-TimeAlignmentTimer* *or srs-ValidityArea-TimerAlignmentTimer*  [Rapp] Not clear which agreement supports this one. Currently we have only agreed to start the TAT when TA command is received. |
| ZTE | 2> if there is ongoing Positioning SRS Transmission in RRC\_INACTIVE as in clause 5.26:  3> if SRS positioning validity area is configured:  4> start or restart the *srs-ValidityAreaTimeAlignmentTimer* associated with the indicated TAG.  3> else:  4> start or restart the *inactivePosSRS-TimeAlignmentTimer* associated with the indicated TAG. | We should first agree with Rel-17 timer and Rel-18 timer cannot work together first  [Rapp] Did anyone propose to use them at the same time? |
| Lenovo000 | 2> if there is ongoing Positioning SRS Transmission in RRC\_INACTIVE as in clause 5.26:  3> if SRS positioning validity area is configured(excluding pre-configured SRS):  4> start or restart the *srs-ValidityAreaTimeAlignmentTimer* associated with the indicated TAG.  3> else:  4> start or restart the *inactivePosSRS-TimeAlignmentTimer* associated with the indicated TAG. | As the agreement made this meeting:  The following criterion needs to be defined for the start/re-start of the area-specific TA timer:  **Reception of RRCRelease message containing the SRS configuration (excluding pre-configured SRS).**  The SRS pre-configuration cannot be regarded as the start/restart conditions as the agreements, which should be captured in spec.  [Rapp] This is the agreement during this meeting and will be captured during the post meeting email discussion. |

## Discussion during R2#123 for MAC CR for sidelink positioning

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| vivo01 | Change 0  If the MAC entity has been configured with Sidelink resource allocation mode 1 as indicated in TS 38.331 or the MAC entity has been configured with resource allocation Scheme 2 and the PDCCH is received for the resource allocation on shared resource pool for SL-PRS transmission [5], | resource allocation Scheme 2 -> resource allocation mode 1  {Rapp} corrected to resource allocation scheme 1 |
| vivo02 | Editor's NOTE: FFS retransmission of PRS on shared and dedicated resource pool. | retransmission -> repetition?  **Conclusion**  Do not support ACK/NACK feedback for SL-PRS or lower-layer feedback-based retransmissions in Release 18.  [Rapp] Should be retransmission. |
| vivo03 | Editor's NOTE: FFS SL-PRS transmission on shared resource pool when the MAC PDU has been positively acked. | The intention of this FFS is not clear.  [Rapp] The intention is that if on shared RP, SL-PRS and data area transmitted together and data is acked with PSFCH, what should be done to SL-PRS |
| vivo04 | Editor's NOTE: FFS relation with HARQ for SL-PRS transmission on shared resource pool | See vivo02 |
| vivo05 | For each SL-PRS occasion, the MAC entity shall:  1> for each SCI valid for this SL-PRS occasion:  2> instruct the physical layer to perform SL-PRS reception on the SL-PRS occasion.  1> if this SL-PRS transmission is associated to unicast:  2> if the destination ID in the corresponding SCI is equal to the UE's source ID and source ID in the corresponding SCI is equal to the UE's destination ID:  3> instruct the physical layer to perform SL-PRS reception on the SL-PRS transmission occasion.  1> else if this SL-PRS transmission is associated to broadcast or groupcast:  2> if the destination ID in the corresponding SCI is equal to the UE's source ID  3> instruct the physical layer to perform SL-PRS reception on the SL-PRS transmission occasion. | Seems duplicated instruction to perform SL-PRS reception.  [Rapp] One is for unicast, another is for broadcast and groupcast. |
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