**3GPP TSG-RAN WG1 Meeting #110 R1-220XXXX**

**Toulouse, France, August 22nd – 26th, 2022**

**Title:** [Draft]LS on PDCCH skipping

**Response to:**

**Release:** Rel-17

**Work Item:** NR\_UE\_pow\_sav\_enh-Core

**Source:** RAN1, MediaTek Inc.

**To:** RAN2

**Contact Person:**

**Name:** Weide Wu

**E-mail Address:** Weide.Wu@mediatek.com

**Send any reply LS to: 3GPP Liaisons Coordinator,** **mailto:3GPPLiaison@etsi.org**

**Attachments:** No

**1. Overall Description:**

RAN1 discussed and agreed the following related to PDCCH skipping for Rel-17 UE power saving enhancements for NR:

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| **RAN1#109-e Meeting**Agreement* If the UE is indicated a skipping of PDCCH monitoring, UE terminates the skipping of PDCCH monitoring from the first slot after the last OFDM symbol of a positive SR transmission.
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| **RAN1#110 Meeting****Conclusion**For Rel-17, RAN1 has no consensus in whether UE resumes monitor of PDCCH during skipping duration (i.e., PDCCH skipping is cancelled) when DRX Retransmission timer DL/UL is started. **Agreement****Include the following TP to Clause 10.4, TS 38.213 related to PDCCH skipping and outside active time:**

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| **TP to Clause 10.4, TS 38.213****<Unchanged part omitted>**When the PDCCH monitoring adaptation field indicates to a UE to skip PDCCH monitoring for a duration on the active DL BWP of a serving cell, the UE starts skipping of PDCCH monitoring at the beginning of a first slot that is after the last symbol of the PDCCH reception providing the DCI format with the PDCCH monitoring adaptation field. If the UE transmits a PUCCH providing a positive SR after the UE detects a DCI format providing the PDCCH monitoring adaptation field indicating to the UE to skip PDCCH monitoring for the duration on the active DL BWP of the serving cell, the UE resumes PDCCH monitoring starting at the beginning of a first slot that is after a last symbol of the PUCCH transmission. **If the DRX group of the serving cell is configured and enters outside Active Time, the UE terminates PDCCH skipping for the serving cell.****<Unchanged part omitted>** |

**Possible Proposal 2.1-1a (2nd\_Rnd):****Include the following TP to Clause 10.4, TS 38.213 for capturing RAN1 and RAN2 agreements related to PDCCH skipping and RACH procedure.**

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| **TP to Clause 10.4, TS 38.213****<Unchanged part omitted>**When the PDCCH monitoring adaptation field indicates to a UE to skip PDCCH monitoring for a duration on the active DL BWP of a serving cell, the UE starts skipping of PDCCH monitoring at the beginning of a first slot that is after the last symbol of the PDCCH reception providing the DCI format with the PDCCH monitoring adaptation field. If the UE transmits a PUCCH providing a positive SR after the UE detects a DCI format providing the PDCCH monitoring adaptation field indicating to the UE to skip PDCCH monitoring for the duration on the active DL BWP of the serving cell, the UE resumes PDCCH monitoring starting at the beginning of a first slot that is after a last symbol of the PUCCH transmission. **During the time of *ra-ResponseWindow* or *msgB-ResponseWindow* or the duration where *ra-ContentionResolutionTimer* is running, the UE shall not skip PDCCH monitoring on SpCell.****<Unchanged part omitted>** |

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In addition, RAN1 respectfully asks RAN2’s clarification on the meaning of “UE ignores PDCCH skipping” in previous RAN2 LS to RAN1 on PDCCH skipping in RRC\_CONNECTED (R2-2201960).

**2. Actions:**

RAN1 respectfully asks RAN2 to take above information into account in their work and provide clarification on RAN1’s question.

**3. Date of Next TSG-RAN WG1 Meetings:**

TSG-RAN WG1 Meeting #110-bis-e 10– 19 Oct. 2022 E-Meeting

TSG-RAN WG1 Meeting #111 14 – 18 Nov. 2022 EU