**3GPP TSG RAN WG1 Meeting #107-e R1-** **210xxxx**

**e-Meeting, 11th – 19th November 2021**

**Title: Summary of NR UE Power Saving**

**Agenda item: 7.2.7**

**Source: CATT**

**Document for: Discussion**

# Final Summary of Email Discussions and Agreements

# Email Discussion [106-e-NR\_UE\_Pow\_Sav\_01]

# Email Discussion during Preparation[106-e-Prep\_NR\_UE\_Pow\_Sav]

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| **Company** | **Supporting Issues (1 and 2) and draft CRs** | **Comments** |
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# Summary of Open Issues

* **Issues 1: Editorial change on missing “is” in TS 38.214**

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| 38.214 Clause 6.1.2.1<omitted text>When the UE is configured with *minimumSchedulingOffsetK2* in an active UL BWP it applies a minimum scheduling offset restriction indicated by the '*Minimum applicable scheduling offset indicator*' field in DCI format 0\_1 or DCI format 1\_1 if the same field is available. When the UE is configured with *minimumSchedulingOffsetK2* in an active UL BWP and it has not received '*Minimum applicable scheduling offset indicator*' field in DCI format 0\_1 or 1\_1, the UE shall apply a minimum scheduling offset restriction indicated based on '*Minimum applicable scheduling offset indicator*' value '0'. When the minimum scheduling offset restriction is applied the UE is not expected to be scheduled with a DCI in slot *n* to transmit a PUSCH scheduled with C-RNTI, CS-RNTI, MCS-C-RNTI or SP-CSI-RNTI with *K*2 smaller than$\left⌈K\_{2min}⋅\frac{2^{μ^{'}}}{2^{μ}}\right⌉$, where *K*2min and $μ$ are the applied minimum scheduling offset restriction and the numerology of the active UL BWP of the scheduled cell when receiving the DCI in slot *n*, respectively, and $μ^{'}$ is the numerology of the new active UL BWP in case of active UL BWP change in the scheduled cell and is equal to $μ$, otherwise. The minimum scheduling offset restriction is not applied when PUSCH transmission is scheduled by RAR UL grant or fallbackRAR UL grant for RACH procedure, or when PUSCH is scheduled with TC-RNTI. The application delay of the change of the minimum scheduling offset restriction is determined in Clause 5.3.1.  |

* **Issue 2:** **Correction on the wording “by Searchspace with indication by DCI format 2\_6” and editorial change**

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| TS38.21310.3 PDCCH monitoring indication and dormancy/non-dormancy behaviour for SCellsA UE configured with DRX mode operation [11, TS 38.321] can be provided the following for detection of a DCI format 2\_6 in a PDCCH reception on the PCell or on the SpCell [12, TS 38.331]- a PS-RNTI for DCI format 2\_6 by *ps-RNTI*- a number of search space sets, by *searchSpace* with an indication by *dci-Format2-6*, to monitor PDCCH for detection of DCI format 2\_6 on the active DL BWP of the PCell or of the SpCell according to a common search space as described in clause 10.1- a payload size for DCI format 2\_6 by *sizeDCI-2-6*- a location in DCI format 2\_6 of a Wake-up indication bit by *ps-PositionDCI-2-6*- a '0' value for the Wake-up indication bit, when reported to higher layers, indicates to not start the *drx-onDurationTimer* for the next long DRX cycle [11, TS 38.321]- a '1' value for the Wake-up indication bit, when reported to higher layers, indicates to start the *drx-onDurationTimer* for the next long DRX cycle [11, TS 38.321]========================= Unchanged parts =========================If a UE is provided search space sets to monitor PDCCH for detection of DCI format 2\_6 in the active DL BWP of the PCell or of the SpCell and the UE detects DCI format 2\_6, the physical layer of the UE reports the value of the Wake-up indication bit for the UE to higher layers [11, TS 38.321] for the next long DRX cycle.========================= Unchanged parts ========================= |

# Contributions summary and proposals

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| Nokia, Nokia Shanghai Bell[2] | * Editorial change with missing “is” in cross-slot scheduling in 38.214
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| Huawei, HiSilicon [3] | * Correct that a search space set for monitoring DCI format 2\_6 is provided by a paramter of *searchSpace* with an indication by *dci-Format2-6*, which is the common usage in TS 38.213, e.g. in clause 10.1.
* Change “*size-DCI-2-6*” to “*sizeDCI-2-6*” in clause 10.3 to match the parameter name in TS 38.331.
* Change “a” to “the” in the sentence of “the physical layer of a UE reports the value of the Wake-up indication bit for the UE to higher layers [11, TS 38.321] for the next long DRX cycle”.
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# Reference

1. ~~R1-2112264 Remaining issues for Power Saving Qualcomm Incorporated~~
2. R1-2112375 Missed editorial on cross-slot scheduling based power saving Nokia, Nokia Shanghai Bell
3. R1-2112410 Maintenance on Rel-16 UE Power Saving Huawei, HiSilicon