**3GPP TSG-RAN WG2 Meeting #112e R2-20xxxxx**

**Electronic, 2 – 13 November 2020**

**Agenda item: 6.3.3**

**Source: Qualcomm Incorporated**

**Title: [AT112e][508][NRU]: Miscellaneous corrections RRC**

**Document for: Discussion and decision**

# Introduction

During the first online session of RAN2#112e for NR-U, it was decided to further discuss several RRC CRs in the following email discussion. Other less controversial CRs will be merged into one CR per Chair Notes from the session.

* [AT112-e][508][NR-U] Miscellaneous corrections RRC (Qualcomm)

Scope:

* + - Captured agreed changes and send out for review

Intended outcome:

* + - Agreeable CR

Deadline for providing comments:

* + - Companies input: Nov. 11th
    - Updated CR ready for approval: Nov. 12th

This document will capture feedback from companies and suggest whether or not to agree to the CR, possibly with some modifications.

|  |  |
| --- | --- |
| Company | Contact Name, Email |
|  |  |
| Huawei | Tao Cai, tao.cai@huawei.com |
| Nokia | jarkko.t.koskela@nokia.com |
| Apple | yuqin\_chen@apple.com |
| Xiaomi | wuyumin@xiaomi.com |
| Intel Corporation | Seau.s.lim@intel.com |
| MediaTek | pradeep[dot]jose[at]mediatek[dot]com |
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| vivo | [yitao.mo@vivo.com](mailto:yitao.mo@vivo.com) |
|  |  |

# Discussion

[R2-2009295](file:///C:\evutukuri\work\5G\RAN2\docs\R2-2009295.zip) Correction on description for extendedRAR-window Huawei, HiSilicon CR Rel-16 38.306 16.2.0 0424 - F NR\_unlic-Core

=> General support, move to email discussion 508

This change clarifies the UE capability for monitoring extended RAR window.

Summary of Changes:

Correct the field description for extendedRAR-window.

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **Huawei** | **Yes** | **It is good to be accurate with at least “maximum window” and “LSB”.** |
| **Nokia** | **No strong view** | **We don’t really see much difference with changed text but nothing seems to be wrong with CR either** |
| **Apple** | **Yes** | **Fine to have the change.** |
| **Xiaomi** | **Yes** |  |
| **Intel** | **Yes** | **It would be good to update it if we are keeping this capability** |
| **MediaTek** | **Yes** |  |
| **Samsung** | **No strong view** | **but fine to have these non-technical changes** |
| **ZTE** | **Discussion needed**  **Also related to CB [507] ??** | We are not sure if this discussion also includes the CB 507 that was mentioned in the notes (since that thread has not yet been triggered). But these are related issues. So, we want to express our views here in general.   1. As discussed online, we have agreed that this capability is not needed, but RAN1 indicate that this is needed for LAA style operation. Since there is no LAA capability, we think we should first discuss how to clarify that this field is only applicable if UE only supports LAA style operation in NR-U (i.e. non-standalone only mode). 2. It should be clarified that this is only applicable for NR-U but not for 2-step RACH, the simplest way would be to modify as follows:   *Indicates whether the UE supports the configuration of maximum length of RAR window with a value larger than 10ms and up to 40ms by decoding of the 2 LSB bits of SFN indication in DCI 1\_0 scrambled with RA-RNTI.*  In general, we think we should first wait for the issue 1 to be decided before fine tuning this wording here. |
| **vivo** | **Yes with comments** | **It looks a bit redundant to say “2 LSB bits”. Thus, we propose the terminology “2 LSB bits of SFN indication” is replaced by “2 LSBs of SFN”, which is also used in 38.212 (i.e. LSBs of SFN). Besides, we share a similar view with ZTE’s second proposal.**  **Based on the above, we propose the following text:**  **Indicates whether the UE supports the configuration of maximum length of RAR window with a value larger than 10ms and up to 40ms by decoding of the 2 LSBs ~~bits~~ of SFN ~~indication~~ in the DCI format 1\_0 with CRC scrambled by RA-RNTI*.*** |
|  |  |  |

**Summary:**

**Proposal:**

[R2-2009296](file:///C:\evutukuri\work\5G\RAN2\docs\R2-2009296.zip) Correction of field description for ra-ResponseWindow Huawei, HiSilicon, Ericsson CR Rel-16 38.331 16.2.0 2052 - F NR\_unlic-Core, NR\_2step\_RACH-Core

=> Need to check if RAN1 text is sufficient and whether it is new or not. Note that RAN2 has discussed this last meeting and decided to keep the sentence. Move to email discussion 508

Summary of Changes:

Remove the sentence for the content of DCI when the length of the rar-window is larger than 10ms

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **Huawei** | **Yes** | During last meeting, some commented that RAN1 has not yet finalized their work and we should postpone this to the future meetings.  Apparently RAN1 has finalized this now, according to the current spec 38.212, it reads as follows for the LSBs of SFN in the DCI  cid:image001.png@01D6A641.37342E60  Based on this, we think it safe and clear enough to remove the redundant description in the RRC spec about the DCI content. |
| **Nokia** | **Yes** |  |
| **Apple** | **Yes** |  |
| **Xiaomi** | **Yes** |  |
| **Intel** | **Yes** |  |
| **MediaTek** | **Yes** |  |
| **Samsung** | **Yes** |  |
| **ZTE** | **Yes** |  |
| **vivo** | **Yes** | **There is no need to have duplication.** |
|  |  |  |

[R2-2009349](file:///C:/Users/panidx/Documents/TSGR2_112-e/Docs/R2-2009349.zip) Clarification on HARQ processes sharing Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.2.0 2055 - F NR\_unlic-Core

=> Move to email discussion

Summary of Changes:

Change the field description for configuredGrantTimer as: “When *cg-RetransmissonTimer* is configured, if HARQ processes are shared among different configured grants on the same BWP, configuredGrantTimer \* periodicity is set to the same value for the configurations that share HARQ processes on this BWP.”

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **Huawei** | **Yes** |  |
| **Nokia** | **Yes** |  |
| **Apple** | **Yes** |  |
| **Xiaomi** | **Yes** |  |
| **Intel** | **Yes** |  |
| **MediaTek** | **Yes** |  |
| **Samsung** | **Yes** | **(unnecessary restrictions)** |
| **ZTE** | **Yes** |  |
| **vivo** | **Yes** |  |
|  |  |  |

# Conclusion

This report captures the feedback for some of the RRC CRs submitted for NR-U and, based on feedback from the companies, the following are proposed: