3GPP TSG-RAN WG2 #114-e R2-21xxxxx

Electronic, 19th – 27th May, 2021

Agenda Item: 5.4.1

Source: ZTE Corporation

Title: [AT114-e][007][NR15] Connection Control IV (ZTE)

Document for: Discussion, Decision

# Introduction

This document is to kick off the following email discussion:

* [AT114-e][007][NR15] Connection Control IV (ZTE)

Scope: Treat R2-2105392, R2-2105403, R2-2104827, R2-2104828, R2-2105404, R2-2105405, R2-2104905, R2-2104906, R2-2106264, R2-2106265

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

The plan for Schedule A is below:

A first round with **Deadline for comments Friday May 21 1000 UTC** to settle scope what is agreeable etc (phase 1).

A pre-final round with **Deadline for any functional and/or scope comments Wednesday May 26 1200 UTC.** At this point, non-agreeable parts shall be removed/excluded. (phase 2)

A final round (last 24h) for checking and smaller simplification / removal comments only including agreeable parts, with Deadline **EOM** (at this point all outcome documents need to be available in inbox with tdoc numbers).

Additional check-points etc if needed are defined by the Rapporteur. Offline discussion rapporteur must notify chairman / session chair if on-line comeback discussion is needed, if discussion doesn’t converge etc.

# Contact Information

|  |  |
| --- | --- |
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# Discussion

Companies are requested to add their comments on each of the CRs of this email discussion in the questionnaires below.

## First Active Downlink BWP

*Was agreeable last meeting, avoid repeat discussion if possible*

[R2-2106460](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106460.zip) Correction on firstActiveDownlinkBWP-Id ZTE Corporation, Sanechips, Ericsson, Nokia CR Rel-15 38.331 15.13.0 2530 2 F NR\_newRAT-Core

R2-2106461 Correction on firstActiveDownlinkBWP-Id(R16) ZTE Corporation, Sanechips, Ericsson, Nokia CR Rel-16 38.331 16.4.1 2531 2 A NR\_newRAT-Core

The reason for changes is:

|  |  |
| --- | --- |
| This CR was discussed at RAN2#113bis (R2-2103793) and the contents were concluded to be agreeable (see offline [005] report in R2-2104633).  However, the CR was marked as postponed by mistake and hence we resubmit this for approval. The actual proposed change is same as the one in R2-2103793.  In the current RRC spec the following description highlighted below, is not accurate because the intention of this is to indicate that the network shall set the *firstActiveDownlinkBWP-Id* and *firstActiveUplinkBWP-Id* to the same value **when performing RA**.   |  | | --- | | ***firstActiveDownlinkBWP-Id***  If configured for an SpCell, this field contains the ID of the DL BWP to be activated upon performing the RRC (re-)configuration. If the field is absent, the RRC (re-)configuration does not impose a BWP switch.  If configured for an SCell, this field contains the ID of the downlink bandwidth part to be used upon MAC-activation of an SCell. The initial bandwidth part is referred to by BWP-Id = 0.  Upon PCell change and PSCell addition/change, the network sets the *firstActiveDownlinkBWP-Id* and *firstActiveUplinkBWP-Id* to the same value. |     That is the UE expects to use the active DL BWP with the same *bwp-Id* as the active UL BWP when performing RA. |

**Q1: Do you agree with the two CRs R2-2106460 and** **R2-2106461?**

|  |  |  |
| --- | --- | --- |
| Company | Agree?  (Yes or No) | Comments |
| Apple | ok |  |
| QCOM | Yes |  |
| MediaTek | Yes |  |
| Huawei, HiSilicon | Yes | Should be merged to rapporteur CR according to the consensus of the last meeting in R2-2104633:  ***For Active BWP change (R2-2103793 and R2-2103794):***  *Proposal 2: Agree the changes in R2-2103793 and R2-2103794 and merge these into the rapporteur’s CRs.* |
| Samsung | Yes | Fine with Huawei's suggestion too. |
| Nokia | Yes | Fine with Huawei's suggestion too. |
| ZTE | Yes | The two CRs involve functional modification, so we friendly suggest the two CRs should be separate CRs, and do not be merged to rapporteur CR. |
| vivo | Yes | Fine to merge the CRs to rapporteur CR based on last meeting discussion. |
| OPPO | Yes |  |
| LG | Yes |  |
| CATT | Yes |  |
|  |  |  |

## Default configuration

[R2-2104827](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104827.zip) CR on default configuration OPPO CR Rel-15 38.331 15.13.0 2583 - F NR\_newRAT-Core

[R2-2104828](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104828.zip) CR on default configuration OPPO CR Rel-16 38.331 16.4.1 2584 - A NR\_newRAT-Core

The reason for changes is:

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| --- |
| In 5.3.7.4, it is specified that   1. apply the **specified configuration** defined in 9.2.1 for SRB1;   However, 9.2.1 is for “default” configuration, of which the definition is different from “specified” configuration defined in 9.1.x, i.e., default configuration can be overriden but specified configuration can**not** be. |

**Q2: Do you agree with the problem identified and the changes in R2-2104827,** **R2-2104828?**

|  |  |  |
| --- | --- | --- |
| Company | Agree?  (Yes or No) | Comments |
| Apple | No strong view, the intention has not changed. |  |
| QCOM | Yes |  |
| MediaTek | Yes | Looks like editroial. Suggest to put in rapporteur’s CR |
| Huawei, HiSilicon | Yes | Can be merged to rapporteur CR. |
| Samsung | - | Fine but minor/editorial, so prefer merging it into rapprteur CR. |
| Nokia | Yes, but | Merge it to rapporteur CR |
| ZTE | Yes |  |
| vivo | Yes |  |
| OPPO | Yes | Proponent |
| LG | Yes | We think it is not editorial, but ok to merge to rapporteur CR. |
| CATT | Yes | It should be merged to rapporteur CR |
|  |  |  |

## AperiodicSRS-Resource

[R2-2105404](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105404.zip) Correction on aperiodicSRS-Resource ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2624 - D NR\_newRAT-Core

[R2-2105405](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105405.zip) Correction on aperiodicSRS-Resource(R16) ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2625 - A NR\_newRAT-Core

The reason for changes is:

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| --- |
| 1. In the RAN2#111-e meeting, the CR R2-2007504 was agreed and merged to rapporteur CR, and the following agreement was made:  * [003] Both Partly merged, The reference clause in the field description of *aperiodicSRS-ResourceTriggerList* needs to be updated: change “6.1.1.2” to “6.1”. This change is merged into Rapporteur’s CR for Rel-15/16 specification.   But the agreement is not correct, the intention of the CR R2-2007504 is to change “6.1.1.2” to “6”.  In addition, the field description of *aperiodicSRS-ResourceTrigger* should be modified simultaneously.  2. The field description of *rateMatchPatternToAddModList* in *ServingCellConfig* is not correct, and the correct quote is 5.1.4.1, not 5.1.2.2.3, same as the field description of *rateMatchPatternToAddModList* in *ServingCellConfigCommon*. |

**Q3: Do you agree with the problem identified and the changes in R2-2105404, R2-2105405?**

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| --- | --- | --- |
| Company | Agree?  (Yes or No) | Comments |
| Apple | Yes |  |
| QCOM | Yes |  |
| MediaTek | Yes | Looks like editroial. Suggest to put in rapporteur’s CR |
| Huawei, HiSilicon | Yes | Can be merged to rapporteur CR. |
| Samsung | - | Fine but minor/editorial, so prefer merging it into rapprteur CR. |
| Nokia | Yes, but | Merge it to rapporteur CR |
| ZTE | Yes |  |
| vivo | Yes |  |
| OPPO | Yes |  |
| LG | Yes |  |
| CATT | Yes | Merge it to rapporteur CR |
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## CSI-RS configuration

[R2-2104905](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104905.zip) Correction on CSI-RS configuration vivo CR Rel-15 38.331 15.13.0 2587 - F NR\_newRAT-Core

[R2-2104906](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104906.zip) Correction on CSI-RS configuration vivo CR Rel-16 38.331 16.4.1 2588 - A NR\_newRAT-Core

The reason for changes is:

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| --- |
| 1. In current description of parameter *maxNrofNZP-CSI-RS-ResourceSets*, it is mentioned that:   *Maximum number of NZP CSI-RS resources per cell.*  Actually, more than one resources could be configured in one resource set. This parameter should be used to define the maximum number of NZP CSI-RS resource sets per cell. Thus, the corresponding description should be updated.  Similar issue exists for parameter *maxNrofCSI-IM-ResourceSets*.   1. In the description of parameter *maxNrofCSI-IM-Resources* and *maxNrofCSI-IM-ResourcesPerSet*, TS 38.214 is referred.   Actually, in TS 38.214, there is no such parameters. Only the *csi-IM-ResourceId* or the entry number (i.e. *csi-IM-ResourcesForInterference*) in *csi-IM-ResourceSetList* is referred.  Thus, the corresponding description should be updated. |

**Q4: Do you agree with the problem identified and the changes in R2-2104905,** **R2-2104906?**

|  |  |  |
| --- | --- | --- |
| Company | Agree?  (Yes or No) | Comments |
| Apple | Yes | rapporteur CR of editorial changes? |
| QCOM | Yes | editorial change ... may be a rapporteur CR |
| MediaTek | Yes | Looks like editroial. Suggest to put in rapporteur’s CR |
| Huawei, HiSilicon | Yes | Can be merged to rapporteur CR. |
| Samsung | - | Fine but minor/editorial, so prefer merging it into rapprteur CR. |
| Nokia | Yes, but | Can be merged to rapporteur's CR as these are purely editorial changes and nothing changes with semantics. |
| ZTE | Yes | Suggest to merge it into rapporteur’s CR. |
| Vivo | Yes |  |
| OPPO | Yes |  |
| LG | Yes |  |
| CATT | Yes | It can be merged into rapporteur CR |
|  |  |  |

## A-CSI trigger state configuration

[R2-2106264](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106264.zip) Correction on A-CSI trigger state configuration vivo CR Rel-15 38.331 15.13.0 2685 - F NR\_newRAT-Core

[R2-2106265](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106265.zip) Correction on A-CSI trigger state configuration vivo CR Rel-16 38.331 16.4.1 2686 - A NR\_newRAT-Core

The reason for changes is:

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| --- |
| Parameters *nzp-CSI-RS-ResourcesforChannel* and *qcl-info-forChannel* are now being referred in the field descriptions of *csi-IM-ResourcesForInterference* and *qcl-info*  , however, it is not correct since these two parameters are not defined in the current specification.  Actually, *nzp-CSI-RS-ResourcesforChannel* should be replaced to the *resourceSet* IE in *CSI-AssociatedReportConfigInfo*. And *qcl-info-forChannel* should be replaced to *qcl-info*. |

**Q5: Do you agree with the problem identified and the changes in R2-2106264,** **R2-2106265?**

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| --- | --- | --- |
| Company | Agree?  (Yes or No) | Comments |
| Apple | Yes |  |
| QCOM | Yes |  |
| MediaTek | Yes with comment | We think the term „above“ is a little bit strange. Instaed of „*resourceSet* above“, we suggest to use the term „*resourceSet* within *nzp-CSI-RS*“  Also this kind of change is more suitable in rapporteur’s CR. |
| Huawei, HiSilicon | Yes | MTK’s update is fine to us. |
| Samsung | - | Fine but minor/editorial, so prefer merging it into rapprteur CR. We are also fine with suggestion from MediaTek. |
| Nokia | Yes, but | Can be merged to rapporteur's CR as these are purely editorial changes and nothing changes with semantics. |
| ZTE | Yes | Agree with MediaTek’s view. |
| vivo | Yes | Proponent.  We are fine with MediaTek’s suggestion. |
| OPPO | Yes | Go with MediaTek’s suggestion |
| LG | Yes | Ok with MTK’s update. |
| CATT | Yes |  |
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# Conclusion

TBD

# References

[1]