**3GPP T****SG-RAN WG2 Meeting #118-electronic R2-220xxxx**

**Online, May 9th - May 20th, 2022**

**Agenda item: 5.1.4.1**

**Source: vivo**

**Title: Report of [AT118-e][019][NR1516] CP Miscellanous**

**Document for: Discussion and Decision**

# 1 Introduction

This contribution is aimed at reporting the discussion and results of the following offline discussion:

* [AT118-e][019][NR1516] CP Miscellanous (vivo)

 Scope: Treat R2-2204902, R2-2205428, R2-2205429, R2-2204845, R2-2204846, R2-2205827, R2-2204728, R2-2204729, R2-2204845, R2-2204846, R2-2205827, R2-2204728, R2-2204729, R2-2205503, R2-2205504, R2-2205298, R2-2205299, R2-2205300

 Ph1 Determine agreeable parts, Ph2 for agreeable parts agree CRs (offline agreement, CB online only if necessary).

 Intended outcome: Report, Agreed CRs

 Deadline: Schedule 1

The discussion scope is to gather companies’ views on the contributions [1]-[13]. Companies are invited to provide their views by May 12th (Thursday), 2022, 12:00 UTC for phase-1 discussion.

# 2 Participants

To facilitate this offline discussion amongst the delegates, would you please fill in your name and the email address in the table below.

|  |  |
| --- | --- |
| Delegate name | E-mail address |
| Yitao Mo (Stephen) | yitao.mo@vivo.com |
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# 3 Phase-1 Discussion

## 3.1 Clarification for Inter-MN HO without SN change

In the previous RAN2 meeting, the need for Stage 3 CR regarding inter-MN handover without SN change was discussed but postponed without consensus. The corresponding agreement is given as follows,

|  |
| --- |
| **RAN2#117 meeting agreements**R2-2202807 Clarification on inter-MN handover without SN change NEC CR Rel-15 38.331 15.16.0 2907 - F NR\_newRAT-CoreR2-2202808 Clarification on inter-MN handover without SN change NEC CR Rel-16 38.331 16.7.0 2908 - A NR\_newRAT-Core* [029] Both Postponed
 |

To completely solve this issue which has been discussed for almost one year, the following proposal is given in the contribution [1],

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| --- |
| **Proposal 1: RAN2 to agree to capture the following in a Chairman notes.*** RAN2 confirms that according to the current RRC spec, both fields *sourceConfigSCG* and *scg-RB-Config* in *CG-ConfigInfo* can be sent in the following cases:
	+ SN change procedure
	+ Inter-MN HO with SN change
	+ Inter-MN HO without SN change (Case 0)
	+ Inter-MN HO without SN node change (Case 2)
 |

**Q1: Do companies agree with Proposal 1?**

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|  **Company** | **Yes/No/Comments** | **Detailed comments** |
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**Summary:**

## 3.2 Clarification for *p-maxNR-FR1* in NR-DC

In the CRs R2-2205428/5429 [2][3], it is clarified that the filed *p-maxNR-FR1* is also used to indicate the maximum total transmit power to be used by the UE in the NR SCG across all serving cells in frequency range 1, which is not reflected in the current specification. The corresponding correction is quoted as follows,

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| --- |
| ***p-maxNR-FR1***For (NG)EN-DC and NE-DC, the field indicates the maximum total transmit power to be used by the UE in the NR cell group across all serving cells in frequency range 1 (FR1) (see TS 38.104 [12]). For NR-DC, it indicates the the maximum total transmit power to be used by the UE in the NR cell group across all serving cells in frequency range 1 (FR1) (see TS 38.104 [12]) the UE can use in NR SCG. |

**Q2: Do companies agree with the intention of CR?**

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| **Company** | **Yes/No/Comments** | **Detailed comments** |
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**Summary:**

## 3.3 Correction on *rrc-ConfiguredUplinkGrant*

In the CRs R2-2204845/4846/5827 [4]-[6], it is pointed out that the field description parts for both *precodingAndNumberOfLayers* and *pathlossReferenceIndex* are missing within the field *rrc-ConfiguredUplinkGrant*. So the CRs propose to add the following,

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| --- |
| ***pathlossReferenceIndex***Indicates the reference signal used as PUSCH pathloss reference (see TS 38.213 [13], clause 7.1.1). |
| ***precodingAndNumberOfLayers***Indicates the precoding and number of layers (see TS 38.212 [17], clause 7.3.1.1.2). |

**Q3: Do companies agree with the intention of CR?**

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|  **Company** | **Yes/No/Comments** | **Detailed comments** |
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**Summary:**

## 3.4 Correction on T345 for UAI overheating

In the CRs R2-2204728/4729 [7][8], it is mentioned that the stop conditions for T345 specified in the table in section 7.1.1 are not aligned with the procedure text that is specified in section 5.3.7. To this end, it is proposed that the stop conditions for T345 specified in the table in section 7.1.1 shall be revised from “Upon releasing *overheatingAssistance* during the connection re-establishment procedure” to “Upon releasing *overheatingAssistanceConfig* during the connection re-establishment procedure”. More specifically,

| Timer | Start | Stop | At expiry |
| --- | --- | --- | --- |
| T345 | Upon transmitting *UEAssistanceInformation* message with *overheatingAssistance* | Upon releasing *overheatingAssistanceConfig* during the connection re-establishment procedure, upon initiating the connection resumption procedure, and upon receiving *overheatingAssistanceConfig* set to *release.* | No action. |

**Q4: Do companies agree with the intention of CR?**

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| **Company** | **Yes/No/Comments** | **Detailed comments** |
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**Summary:**

## 3.5 Need code correction for *ReferenceTimeInfo*

In NR, upon receiving reference time information in DL information transfer or SIB9, the UE action is to deliver the time to the upper layer, i.e., one shot. However, the need code of *referenceTimeInfo-r1*6 is currently set to Need R, which requires the UE to unnecessarily store the reference time which will be useless after delivering to the upper layer. Thus, the CRs R2-2205503/5504 suggest changing the need code from Need R to Need N in *DLInformationTransfer* and *SIB9*, as follows,

referenceTimeInfo-r16 ReferenceTimeInfo-r16 OPTIONAL, -- Need N

**Q5: Do companies agree with the intention of CR?**

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| **Company** | **Yes/No/Comments** | **Detailed comments** |
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**Summary:**

## 3.6 Correction on NR serving frequency results reporting

According to the sub-clause 5.5.5.1 in TS 36.331, for the event A3/A4/A5/B1-NR/B2-NR measurement, if the *purpose* field is not configured or set to *reportLocation*, the UE will not include NR serving frequency results. However, for the case that the *purpose* field is not configured (i.e. general measurements other than sidelink or sensing measurements), the NR serving cell results are also expected to be reported. Thus, to realize the NR serving cell results reporting when the *purpose* field is not configured, the CRs R2-2205298/5299/5300 suggest the following changes,

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| 1> if the *triggerType* is set to *event*; and if the corresponding measObject concerns NR; and if *eventId* is set to *eventB1-NR* or *eventB2-NR*; or1> if the *triggerType* is set to *event*; and if *eventId* is set to *eventA3* or *eventA4* or *eventA5*:2> if *purpose* for the *reportConfig* or *reportConfigInterRAT* associated with the *measId* that triggered the measurement reporting is set to a value other than *reportLocation* or *purpose* is not configured:3> set the *measResultServFreqListNR* to include for each NR serving frequency that the UE is configured to measure according to TS 38.331 [82], if any, the following:4> set *measResultSCell* to include the available results of the NR serving cell, as specified in 5.5.5.2;4> if the *reportConfig* associated with the *measId* that triggered the measurement reporting includes *reportAddNeighMeas* and if *eventId* is set to *eventA3* or *eventA4* or *eventA5*:5> set *measResultBestNeighCell* to include the available results, as specified in 5.5.5.2, of the non-serving cell with the highest sorting quantity determined as specified in 5.5.5.3;3> for each (serving or neighbouring) cell for which the UE reports results according to the previous, additionally include available beam results according to the following:4> if maxReportRS*-Index* is configured, set *measResultRS-IndexList* to include available results, as specified in 5.5.5.2, of up to *maxReportRS-Index* beams, ordered based on the quantity determined as specified in 5.5.5.3; |

**Q6: Do companies agree with the intention of CR?**

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| **Company** | **Yes/No/Comments** | **Detailed comments** |
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**Summary:**

# 4 Conclusion

This discussion report is summarized with final proposals as follows,

# 5 Reference

1. R2-2204902, Confirmation for inter-MN HO without SN change, NEC.
2. R2-2205428, Correction on FR1-FR1power control parameters of NR-DC, CATT.
3. R2-2205429, Correction on FR1-FR1power control parameters of NR-DC, CATT.
4. R2-2204845, Correction on rrc-ConfiguredUplinkGrant in Rel-15, vivo.
5. R2-2204846, Correction on rrc-ConfiguredUplinkGrant in Rel-16, vivo.
6. R2-2205827, Correction on rrc-ConfiguredUplinkGrant in Rel-17, vivo.
7. R2-2204728, Correction on T345 for UAI overheating, OPPO.
8. R2-2204729, Correction on T345 for UAI overheating, OPPO.
9. R2-2205503, Need code correction for ReferenceTimeInfo, Ericsson.
10. R2-2205504, Need code correction for ReferenceTimeInfo, Ericsson.
11. R2-2205298, Correction on NR serving frequency results reporting for event-triggered measurement (R15), Huawei, HiSilicon.
12. R2-2205299, Correction on NR serving frequency results reporting for event-triggered measurement (R16), Huawei, HiSilicon.
13. R2-2205300, Correction on NR serving frequency results reporting for event-triggered measurement (R17), Huawei, HiSilicon.