**3GPP TSG-RAN WG2 Meeting #113-e *R2-210xxxx***

**Online, 25 January–5 February 2021**

**Agenda item: 5.3.1**

**Source: Samsung**

**Title: Report of [AT113-e][002][NR15] User Plane I (Samsung)**

**Document for: Discussion and Agreement**

# 1 Introduction

This is to report the result of the following email discussion in RAN2#113-e Meeting [1].

* [AT113-e][002][NR15] User Plane I (Samsung)

Scope: MAC Treat R2-2100206, R2-2100207, R2-2101510, R2-2101337, R2-2101769, R2-2101351, R2-2101593, R2-2101522, R2-2101523, R2-2101524, R2-2101525

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

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

# 2 Contact Information

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| Company | Contact: Name (E-mail) |
| Samsung | Jaehyuk JANG (jack.jang@samsung.com) |
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# 3 Discussion

## 3.1 Miscellaneous corrections

R2-2100206 Miscellaneous corrections Samsung CR Rel-15 38.321 15.11.0 1003 - F NR\_newRAT-Core

R2-2100207 Miscellaneous corrections Samsung CR Rel-16 38.321 16.3.0 1004 - A NR\_newRAT-Core

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| Company | Agree as is; Agree with changes; Disagree | Detailed Comments |
| Samsung | Agree as is (Rel-15) | Editorial corrections as indicated in the coversheet |
| OPPO | Agree with change | The changes in R15 CR is not mirrored in R16, e.g., the first change “MAC header”. |
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**Conclusion:**

**TBD**

## 3.2 CG and DRX Inactivity Timer

(The following four contributions are discussed together here.)

R2-2101510 Activation of CG and DRX Inactivity Timer LG Electronics Inc. discussion Rel-15 NR\_newRAT-Core

R2-2101337 Activation of CG and DRX Inactivity Timer Ericsson discussion Rel-15 NR\_newRAT-Core R2-2010621

R2-2101769 Further discussions on DRX InactivityTimer operations Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

R2-2101351 Activation of CG/SPS and DRX Inactivity Timer Apple discussion Rel-15 NR\_newRAT-Core, TEI15

The issue has been discussed for a long time, and rappoteur thinks that it would be difficult to change Rel-15 behavior anyway as UE vendors have different implementation from the discussion at the last meeting. If so, we can start the discussion for Rel-16 onwards, and the following options can be considered:

- Option 1: Leave it to UE implemenation as in Rel-15  
(which implies that network should not start *drx-InactivityTimer*, and no specification changes would be needed)

- Option 2: UE (re-)starts *drx-InactivityTimer* when it receives PDCCH to activate DL SPS/UL CG type 2  
(which implies that we could add a NOTE to clarify this)

- Option 3: UE does not (re-)start *drx-InactivityTimer* when it receives PDCCH to activate DL SPS/UL CG type 2  
(which implies that we could add a NOTE to clarify this)

- Option 4: …

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| Company | Which option do you prefer? | Detailed Comments |
| Samsung | Option 1 or 2 | For Rel-15, we can leave it to UE implementation to avoid any impact to UEs in the field.  For Rel-16, we still prefer to have the same behaviour as in LTE (i.e. to Option 2), but can go with Option 1.  Regarding *drx-HARQ-RTT-TimerDL*, *drx-HARQ-RTT-TimerUL*, *drx-RetransmissionTimerDL*, and *drx-RetransmissionTimerUL* in R2-2101510, we can rely on the behaviours in the existing text anyway (i.e. under 'if a MAC PDU is received/transmitted…'), and thus no specification changes would be needed. |
| OPPO | Option1 | For R15, we can leave it to UE implementation. For R16, we can go with LTE baseline which is to start the timer. |
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**Conclusion:**

**TBD**

## 3.3 CG Type 1 upon TA expired

(The following five contributions are discussed together here.)

R2-2101593 Discussion on the handling of CG type 1 resources when TA timer is expired ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

R2-2101522 CR on CG type 1 resources handling when timeAlignmentTimer is expired-Opt 1 ZTE Corporation, Sanechips CR Rel-15 38.321 15.11.0 1038 - F NR\_newRAT-Core

R2-2101523 CR on CG type 1 resources handling when timeAlignmentTimer is expired-Opt 2 ZTE Corporation, Sanechips CR Rel-15 38.321 15.11.0 1039 - F NR\_newRAT-Core

R2-2101524 CR on CG type 1 resources handling when timeAlignmentTimer is expired-Opt 1 ZTE Corporation, Sanechips CR Rel-16 38.321 16.3.0 1040 - F NR\_newRAT-Core

R2-2101525 CR on CG type 1 resources handling when timeAlignmentTimer is expired-Opt 2 ZTE Corporation, Sanechips CR Rel-16 38.321 16.3.0 1041 - F NR\_newRAT-Core

For your convenience, proposals in R2-2101593 are copied below:

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| Proposal 1: RAN2 confirm that the RRC configuration for type 1 configured grant will not be released in case the timeAlignmentTimer expires (i.e. delta configuration is allowed. e.g. for pusch-RepTypeIndicator-r16).  Proposal 2: RAN2 confirm that, after the expiration of timeAlignmentTimer, the type 1 configured grant will not become available unless the type 1 configured grant is initialized again (i.e. will not become available automatically after the start of timeAlignmentTimer ).  Proposal 3:RAN2 confirm that, after the expiration of timeAlignmentTimer, the type 1 configured grant will become unavailable unless a new RRC configuration for type 1 configured grant is received (i.e. although the RRC configuration for type 1 configured grant is not released, RRC configuration for type 1 configured grant should be included in RRC signaling to enable the type 1 configured grant).  Proposal 4: If companies have the same understanding on the proposals 1-3, then the specs are clear. Otherwise, a CR is needed to clarify the expected behaviour on the handling of type1 configured grant in case the timeAlignmentTimer expires. |

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| Company | Do you agree with proposals 1 to 3 in R2-2101593?  Do you support either Option 1 in R2-2101522 or Option 2 in R2-2101523? | Detailed Comments |
| Samsung | No;  Option 1 partially (clear CG type 2 only) | We think that CG type 1 is not released upon expiry of TAT, and UE resumes CG type 1 without (re-)initializing it upon TAT becomes running, as in the current specification.  For the actual changes, RAN2 may consider updating the specification from Rel-15 that UE clears configured uplink grants of CG type 2 upon expiry of TAT. |
| OPPO | Yes | Maybe we need a Note to clarify the behaviour of CG type1 when TAT expiry and the behaviour once TA is obtained. |
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**Conclusion:**

**TBD**

# 4 Conclusion

**TBD**

# 5 References

[1] RAN2 113-e Chairman Notes 2021-01-25 0900 UTC