3GPP TSG-RAN WG2 Meeting #114-e R2-210xxxx

Online, 19 – 27 May 2021

**Agenda item: 6.1.3.1**

**Source: CATT (Rapporteur)**

**Title: Summary of [AT114-e][015][NR16] User Plane IPA CRs (CATT)**

**Document for: Discussion and Decision**

# 1 Introduction

This document is the report of the following email discussion:

* **[AT114-e][015][NR16] User Plane IPA CRs (CATT)**

 Scope: Treat R2-2105762, R2-2105785, R2-2105932, R2-2106206, R2-2106309

 Phase 1, For IPA CRs Confirm CRs or identify needed change. Phase 2, for IPA CR modifications, if any, Work on CRs.

 Intended outcome: Report and Agreed CRs.

 Deadline: Schedule A

Initial deadline for companies’ comments (Phase 1): **Friday May 21 1000 UTC**

Deadline for CR finalization (Phase 2): **Wednesday May 26 1200 UTC**

# 2 Contact Points

Respondents to the email discussion are kindly asked to fill in the following table.

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| --- | --- | --- |
| Company | Name | Email Address |
| CATT (Rapporteur) | Pierre Bertrand | pierrebertrand@catt.cn |
| OPPO | ShiCong | shicong@oppo.com |
| LG | SunYoung LEE | ssunyoung.lee@lge.com |
| Ericsson | Zhenhua Zou | zhenhua.zou@ericsson.com |
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# 3 Discussion

IIoT

[R2-2105762](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_114-e%5CDocs%5CR2-2105762.zip) Corrections on MAC handling of uplink grants within a bundle CATT CR Rel-16 38.321 16.4.0 1070 2 F NR\_IIOT-Core R2-2104541

In R2-2105762, the HARQ entity procedure is updated to restrict the hard-written behaviour by which a dynamic grant is always prioritized over an overlapping configured grant repetition in a bundle to the case where *lch-basedPrioritization* is not configured.

The changes have been agreed in principle on RAN2#113bis-e meeting and there is no further modification in R2-2105762.

**Question 1**: Companies that have a concern with the IPA CR in R2-2105762 are invited to express which change(s) is/are required?

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| Company | Which change is required? |
| OPPO | We in general agree with the intention of the change, however, we have following questions may need further clarifications from the CR proponents:Regarding the change below, it’s true when lch-basedPrioritization is NOT configured, the configured grant should be ignored when it overlaps with dynamic grant. However, isn’t it true that even if when lch-basedPrioritization is configured, and when the CG is NOT prioritized, the CG should also be ignored? So, to us, it seems that the changes miss a case?3> if the MAC entity is not configured with *lch-basedPrioritization* and this uplink grant is part of a bundle of the configured uplink grant, and the PUSCH duration of the uplink grant overlaps with a PUSCH duration of another uplink grant received on the PDCCH; or: |
| LG | The change from OPPO seems not necessary because the concerned case (lch-basedPrioritization is configured and CG is not prioritized) by3> if the MAC entity is configured with *lch-basedPrioritization* and this uplink grant is not a prioritized uplink grant:4> ignore the uplink grant. |
| Ericsson | The technical aspects were discussed in the last meeting. Ericsson does not see any issue pointed out by OPPO. |
| CATT | We agree with LG and Ericsson that the point raised by OPPO is already addressed in the specification so the CR, which was in principle agreed in RAN2#113bis-e does not require any change.  |
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**Summary 1**: OPPO questioned about a behaviour which LG/Ericsson/CATT explained it is already addressed in the specification. No other company expressed a concern.

**Proposal 1**: Agree the IPA CR in R2-2105762

[R2-2105785](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_114-e%5CDocs%5CR2-2105785.zip) Clarification on which uplink grants participate to the intra-UE prioritization procedure CATT, Samsung, Ericsson CR Rel-16 38.321 16.4.0 1066 1 F NR\_IIOT-Core R2-2102763

R2-2105785 proposes to add the additional condition for considering an uplink grant for intra-UE prioritization that the uplink grant is delivered to the HARQ entity to avoid erroneously understood that uplink grants filtered out by the legacy procedure would still participate to the intra-UE prioritization procedure.

The changes have been agreed in principle on RAN2#113bis-e meeting and there is no further modification in R2-2105785.

**Question 2**: Companies that have a concern with the IPA CR in R2-2105785 are invited to express which change(s) is/are required?

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| Company | Which change is required? |
| OPPO | We agree the intention of this change, i.e., the grants which are supposed to participate the prioritization procedure should be those grants be able to be delivered to HARQ entity which are not yet delivered. If this is the correct understanding, we feel the wording can be further improve a bit according to the understanding:When the MAC entity is configured with *lch-basedPrioritization*, for each uplink grant to be delivered to the HARQ entity and whose associated PUSCH can be transmitted by lower layers, the MAC entity shall: |
| LG | The change from OPPO seems not necessary because the intention is to consider only the CGs that is not filtered out by CGT/CGRT, dynamic UL grant, UL grant in RAR, MsgA PUSCH and delivered to the HARQ entity. Filtering is performed prior to lch-basedPrioritization, and thus, CGs are already delivered to the HARQ entity before prioritization. Thus, we don’t think ‘to be’ is necessary. |
| Ericsson | The technical aspects were discussed in the last meeting. Ericsson does not see any issue pointed out by OPPO. |
| CATT | We agree with LG (which is also clarified in the coversheet) and Ericsson that the change by OPPO is not required. |
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**Summary 2**: OPPO suggests a wording improvement that LG/Ericsson/CATT do support. No other company expressed a concern.

**Proposal 2**: Agree the IPA CR in R2-2105785.

NR-U

[R2-2105932](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_114-e%5CDocs%5CR2-2105932.zip) Corrections to BSR/PHR content for NR-U ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1075 1 F NR\_unlic-Core R2-2103023

R2-2105932 proposes to add the restriction that it is up to the implementation of the UE to handle the content of BSR/PHR which is transmitted on configured grant to align the agreements in RAN2#105bis.

The changes have been agreed in principle on RAN2#113bis-e meeting and there is no further modification in R2-2105932.

**Question 3**: Companies that have a concern with the IPA CR in R2-2105932 are invited to express which change(s) is/are required?

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| Company | Which change is required? |
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**Summary 3**: No company expressed a concern.

**Proposal 3**: Agree the IPA CR in R2-2105932.

IAB

[R2-2106206](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_114-e%5CDocs%5CR2-2106206.zip) Miscellaneous corrections on BAP transmitting operation and default routing Huawei, HiSilicon CR Rel-16 38.340 16.4.0 0015 2 F NR\_IAB-Core R2-2104560

R2-2106206 includes miscellaneous corrections to data transfer procedure for BAP:

* In Section 5.2.1.1, add ", and construct BAP Data PDUs as needed (see clause 4.2.2) " in the transmitting operation of BAP entity of the IAB-donor-DU.
* In Section 5.2.1.4.2, add "a" before the "non-F1-U packets".
* In Section 5.2.2, add "data" between the "BAP" and "PDU".

The changes have been agreed in principle on RAN2#113bis-e meeting and there is no further modification in R2-2106206.

**Question 4**: Companies that have a concern with the IPA CR in R2-2106206 are invited to express which change(s) is/are required?

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| Company | Which change is required? |
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**Summary 4**: No company expressed a concern.

**Proposal 4**: Agree the IPA CR in R2-2106206.

PDCP

[R2-2106309](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_114-e%5CDocs%5CR2-2106309.zip) PDCP miscellaneous corrections LG Electronics Inc. (PDCP rapporteur) CR Rel-16 38.323 16.3.0 0078 - F NR\_IIOT-Core, 5G\_V2X\_NRSL-Core

R2-2106309 includes miscellaneous corrections to PDCP:

* Specify that integrity protection and verification are not applied to PDCP Control PDU including EHC feedback to align the the IIoT agreements
* Add “respectively” for respective integrity protection and ciphering procedure;
* Specify that the NOTE in RX\_NEXT is applied only for sidelink UEs

The changes have been agreed in principle on RAN2#113bis-e meeting and there is no further modification in R2-2106309.

**Question 4**: Companies that have a concern with the IPA CR in R2-2106309 are invited to express which change(s) is/are required?

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| Company | Which change is required? |
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**Summary 5**: No company expressed a concern.

**Proposal 5**: Agree the IPA CR in R2-2106309.

# 4 Conclusion

It is proposed to agree the IPA CRs addressed in this email discussion:

**Proposal 1**: Agree the IPA CR in R2-2105762

**Proposal 2**: Agree the IPA CR in R2-2105785.

**Proposal 3**: Agree the IPA CR in R2-2105932.

**Proposal 4**: Agree the IPA CR in R2-2106206.

**Proposal 5**: Agree the IPA CR in R2-2106309.