3GPP TSG-RAN WG2 Meeting #109e [R2-200xxx](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2002087.zip)x

Elbonia, Online, 24 February – 6 March 2020

**Agenda item: 4.5**

**Source: RAN2 Vice-chair (offline email discussion rapporteur)**

**Title: Report of [AT109e][202][LTE15] Discuss remaining LTE Rel-15 CRs (RAN2 VC)**

**Document for: Report**

# 1 Scope of the offline email discussion

This document contains the summary of the offline email discussion “**[AT109e][202][LTE15] Discuss remaining LTE Rel-15 CRs (RAN2 VC)**”, as indicated below:

* [AT109e][202][LTE15] Discuss remaining LTE Rel-15 CRs (RAN2 VC)

Scope:

* + - Discuss the CRs [R2-2001139](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001139.zip), [R2-2001156](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001156.zip), [R2-2001157](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001157.zip), [R2-2001508](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001508.zip), [R2-2001347](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001347.zip) and [R2-2001351](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001351.zip) over offline (email) discussion to solicit opinions from companies on the proposals and CR correctness.
    - Handle any CRs from discussion **201** that are deemed require further discussion

Intended outcome:

* + - Whether any of the CRs can be agreed?
    - For CRs that cabn be agreed, final CRs (by CR proponents)
    - Summary of discussions (by email rappporteur)

Deadline for providing comments and for rappporteur inputs:

* + - Companies input: Thursday, Feb. 27th 17:00 CET
    - Rapporteur summary: Friday, Feb. 28th 17:00 CET (one day for rapporteur to make conclusions)
    - Updated CRs from each CR proponent: Monday Mar. 2nd 17:00 CET
    - Comments on CR wording: Tuesday, March 3rd by 17:00 CET (i.e. one day to provide comments to the updated CR)

# 2 LTE legacy CRs in this offline email discussion

## 2.1 [R2-2001139](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001139.zip), “Inclusion of Maximum Number of PDCP SDUs per TTI for DL Categories 22-26“ Nokia, Nokia Shanghai Bell

The CR in the title is discussed in this section. Companies are requested to provide comments in the table below (one row for each new comment to better keep track of the discussion – please don’t edit the previous comments.

|  |  |  |
| --- | --- | --- |
| **Company** | **Do you agree to the intent of the CR?** | **Detailed comments** |
| Ericsson |  | * Date on the cover page needs to be updated * Reason for change can be updated as follows: “In Annex A, Table A-1 provides the maximum values for DL PDCP SDUs per TTI for each (DL) UE category. R2-1813149 provides CR1628, which introduces UE categories that support 1024QAM. The CR was approved in however the table was not updated accordingly.   **Impact analysis**  Impacted functionality: functionality impacted.  Inter-operability:   * If the network is implemented according to the CR and the UE is not the UE may use wrong estimates on PDCP SDU size per TTI leading to limiting capabilities on packets’ size handling.   If the UE is implemented according to the CR and the network is not the NW will use wrong estimates on PDCP SDU size per TTI, leading to limiting capabilities on packets’ size handling. |
| Qualcomm | **Ok, see comments.** | Note sure what “impacted functionalty: functionality impacted” mean.  Also it would be nice to know how the numbers are calculated. Maybe add something in coverpage? |

Conclusion: TBA

Proposal: TBA

## 2.2 [R2-2001156](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001156.zip), [R2-2001157](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001157.zip) “Correction of UE assistance information Samsung Telecommunications

The CR in the title is discussed in this section. Companies are requested to provide comments in the table below (one row for each new comment to better keep track of the discussion – please don’t edit the previous comments.

|  |  |  |
| --- | --- | --- |
| **Company** | **Do you agree to the intent of the CR?** | **Detailed comments** |
| Ericsson | **Yes, but** | We wonder if we can still fix the timer settings in REL-16 for LTE? It is correct, that RAN2 agreed to allow REL-16 UE to (re-)start the timers for other features, than the one that was triggered. But it would be nice to have similar behaviour as in NR from REL-16 we think.  The revision number for REL-15 CR should be 1?  Perhaps consider some re-wording of NOTE 4:  NOTE 4: The UE is recommended to only start or restart the prohibit timer of the feature that was triggered, but the UE may start or restart timers T340, T341, T342, T343, T344 and T345 when it sends the *UEAssistanceInformation* message. |
|  |  |  |

Conclusion: TBA

Proposal: TBA

## 2.3 [R2-2001508](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001508.zip), “Correction on the content of RRCConnectionReconfigurationComplete message“ Google

The CR in the title is discussed in this section. Companies are requested to provide comments in the table below (one row for each new comment to better keep track of the discussion – please don’t edit the previous comments.

|  |  |  |
| --- | --- | --- |
| **Company** | **Do you agree to the intent of the CR?** | **Detailed comments** |
| Ericsson | **Yes** | The handling seems to be aligned with the handling we have for the *RRCSetupComplete* message. When the UE constructs the *RRSetupComplete* message it only includes e.g. the RLF report if the UE is connecting to EPC (see section 5.3.3.4 in 36.331). |
| Qualcomm | **Partly** | We understand R15 eLTE does not support SON/MDT reporting. However, not sure why a UE connected to 5GC cannot include flightPathInfoAvailable.  Also, this is LTE RRC CR, is correct to say Impacted 5G architecture options:  Standalone  Other specs affected should be filled. |

Conclusion: TBA

Proposal: TBA

## 2.4 [R2-2001347](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001347.zip), “The problem of LTE RLC out-of-order delivery configuration“ Samsung AND [R2-2001351](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001351.zip), “CR on RLC OutOfOrderDelivery configuration“ Samsung

The CR in the title is discussed in this section. Companies are requested to provide comments in the table below (one row for each new comment to better keep track of the discussion – please don’t edit the previous comments.

|  |  |  |
| --- | --- | --- |
| **Company** | **Do you agree to the intent of the discussion document and the CR?** | **Detailed comments** |
| LG | **Yes, but** | In our understanding, the out-of-order delivery function can be used if the t-Reordering is configured to the PDCP entity. Thus, we propose as following text.  Indicates that out-of-order delivery from RLC to PDCP is configured for this RLC entity as specified in TS 36.322 [7]. E-UTRAN sets this field to TRUE only when the associated PDCP entity is configured with *t-Reordering*. |
| Ericsson | **No** | RLC reordering without duplication was discussed, agreed and implemented as part of the HRLLC WI and it shouldn’t be removed now. The network will ensure that the configuration of reordering in different layers wotk together. |
| Qualcomm | **No** | The specs are ok as they are now. There is no “problem” as such. No correction is necessary. |

Conclusion: TBA

Proposal: TBA

# 3 Conclusions

**Conclusions:**

TBA – list of conclusions for each CR.

**Agreed CRs:**

TBA – list of agreed CRs (with Tdoc numbers).

# 4 List of referenced documents

[1] [R2-2001139](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001139.zip), “Inclusion of Maximum Number of PDCP SDUs per TTI for DL Categories 22-26“ Nokia, Nokia Shanghai Bell CR Rel-15 36.306 15.7.0 1736 - F LTE\_1024QAM\_DL-Core, TEI15

[2] [R2-2001156](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001156.zip), “Correction of UE assistance information Samsung Telecommunications“ CR Rel-15 36.331 15.8.0 4210 - F TEI15, NR\_newRAT-Core

[3] [R2-2001157](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001157.zip), “Correction of UE assistance information“ Samsung Telecommunications CR Rel-16 36.331 15.8.0 4164 2 A TEI15, NR\_newRAT-Core R2-1916490

[4] [R2-2001508](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001508.zip), “Correction on the content of RRCConnectionReconfigurationComplete message “ Google Inc. CR Rel-15 36.331 15.8.0 4224 - F LTE\_5GCN\_connect-Core

[5] [R2-2001347](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001347.zip), “The problem of LTE RLC out-of-order delivery configuration“ Samsung discussion LTE\_HRLLC

[6] [R2-2001351](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_109_e/Docs/R2-2001351.zip), “CR on RLC OutOfOrderDelivery configuration“ Samsung CR Rel-15 36.331 15.8.0 4217 - F LTE\_HRLLC