**3GPP TSG-RAN WG2 Meeting #115 electronicR2-210XXXX**

**Online, 16th – 27th August 2021**

**Agenda item:** 8.22

**Source:** CMCC (Rapporteur)

**Title:** The report of [AT115-e][034][NR17] TX diversity (CMCC)

**Document for:** Discussion and Agreement

# 1 Introduction

The document summarizes the following offline discussion:

* [AT115-e][034][NR17] TX diversity (CMCC)

 Scope: Treat papers under 8.22 on TX diversity, Determine agreeable points, agree CRs

 Intended outcome: Report, Agreed CRs, LS out if found needed.

 Deadline: Schedule 1

**1ST round:** collect comments and strive to determine the agreeable points. No discussion on the CRs. Deadline for 1st round comments is **Thursday Aug 19 1200 UTC.**

**2nd round:** Strive to agree the CRs and LS out if needed. Deadline for 2nd round is **Thursday Aug 26 1200 UTC.**

# 2 Contact Information

To make it easier to find the correct contact delegate in each company for potential follow-up questions, the rapporteur encourages the delegates who provide input to provide their contact information in this table:

|  |  |
| --- | --- |
| Company | Contact: Name (E-mail) |
| CMCC (Rapporteur) | zhangxiaoran@chinamobile.com |
| Intel | Seau Sian Lim (seau.s.lim@intel.com) |
| Huawei, HiSilicon | Yiru Kuang (kuangyiru@huawei.com) |
| Samsung | Sangyeob Jung (sy0123.jung@samsung) |
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# 3 Discussion

## 3.1 1st round

Two discussion papers [1] [2] related to this topic were submitted to this meeting. Both contributions propose to introduce a new per-band capability signalling for FR1 UEs supporting transparent TxD by allowing early implementation from Rel-15. The difference is which release should the capability signalling be introduced, Rel-16 or Rel-17?

Question 1: Do you agree to introduce a new per-band capability signalling for FR1 UEs supporting transparent TxD by allowing early implementation from Rel-15?

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| --- | --- | --- |
| Company | Agree or disagree | Detailed Comments (e.g., why it is not agreeable) |
| Intel | Agree | This has been agreed by RAN2 pending feedback from RAN4 on whether all PCs are supported and RAN4 already agreed that it is for all PCs in FR1 in Rel-15 and Rel-16 in R4-2107740.Also RAN2 had agreed to have release independent via early implementation from Rel-15 |
| Huawei, HiSilicon | Agree | This has been agreed by RAN2, and based on the conclusion of RAN plenary, the concluded agreements related to Tx Diversity (TxD) shall be followed. |
| Samsung | Agree | Same view with others |
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Conclusions: TBD

Question 2: Which release should the transparent TxD capability signalling be introduced? Rel-16 or Rel-17?

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| Company | Rel-16 or Rel-17 | Detailed Comments |
| Intel | Rel-16 | In our understanding although this is a Rel-17 WI, the capability signalling can be defined starting from Rel-16 and allow early implementation from Rel-15. |
| Huawei, HiSilicon | Rel-16 | Considering the UE capability signalling of transparent TxD has to be early implemented from Rel-15, it is beneficial to introduce the capability signalling from Rel-16 by early implementation from Rel-15, once RAN4 finishes the requirement definition, this feature can be truly implemented. |
| Samsung | Rel-16 |  |
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Conclusions: TBD

## 3.2 2nd round:

Depends on the conclusions in 1st round

# 4 Conclusion

**TBD**

# 5 References

[1] [R2-2107417](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_115-e%5CDocs%5CR2-2107417.zip) Discussion on capability of supporting txDiversity vivo discussion Rel-17 NR\_RF\_TxD-Core

[2] [R2-2108588](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_115-e%5CDocs%5CR2-2108588.zip) Discussion on transparent TxD capability signalling Huawei, HiSilicon, CMCC discussion Rel-17 NR\_RF\_TxD-Core

[3] [R2-2108537](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_115-e%5CDocs%5CR2-2108537.zip) CR on 38.331 for introducing UE capability of txDiversity CMCC CR Rel-16 38.331 16.5.0 2778 - C TEI16, NR\_RF\_TxD-Core

[4] [R2-2108538](file:///D%3A%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2%5CTSGR2_115-e%5CDocs%5CR2-2108538.zip) CR on 38.306 for introducing UE capability of txDiversity CMCC CR Rel-16 38.306 16.5.0 0627 - C TEI16, NR\_RF\_TxD-Core