3GPP TSG-RAN WG2 #121bis electronic R2-20xxxxx

17- 26 April 2023

Agenda Item: 5.1.3.2

Source: ZTE, Sanechips

Title: Summary of offline [AT121bis-e][004][NR1516] UE cap (ZTE)

Document for: Discussion, Decision

# 1 Introduction

This contribution summarizes the following discussion:

* [AT121bis-e][004][NR1516] UE cap (ZTE)

 Scope: Treat R2-2302437 (if needed), R2-2303660, R2-2303877, R2-2303878, R2-2303879, R2-2303880, R2-2303881, R2-2304161, R2-2304162, R2-2304163, R2-2304164, R2-2304165, R2-2304166
Ph1: Determine agreeable parts. Ph2: For agreeable parts, if any, reflect these in agreeable CRs.

 Intended outcome: Report, If applicable: In-Principle-Agreed CRs

 Deadline: Schedule 1

**Contact from companies**

|  |  |
| --- | --- |
| Company | Email |
| ZTE | li.wenting@zte.com.cn |
|  |  |

# Discussion

## 2.1 Part 1: Intended to determine agreeable parts

Part 1 discussion is focusing on reaching conclusion whether the proposals/CRs can be agreed in principle, and Part 2 discussion would then focus on detailed changes for those agreeable contributions.

### LS on the SRS antenna Switching

[R2-2302437](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2302437.zip) LS on clarification on impact of SRS antenna switching for TDD-FDD band combinations (R4-2303633; contact: Huawei) RAN4 LS in Rel-15 NR\_newRAT-Core To:RAN1 Cc:RAN2

RAN2 is CCed. Proposed Noted

For this LS, the Chairman proposed to be noted immediately for that RAN2 is CCed.

**Q1: Do companies agree with the chair’s proposal to Note this LS immediately?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

### SRS Tx Switching Capability

[R2-2303660](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303660.zip) Handling of SRS Tx switching capability Ericsson discussion

|  |
| --- |
| [Proposal 1 RAN2 to confirm the following behaviour for the parameters *txSwitchImpactToRx* and *txSwitchWithAnotherBand* in *srs-TxSwitch*:](#_Toc131702722)[Bands with UL that impact each other define a group (i.e. SRS TX switching on any of the cells will impact UL on all the cells in the group). All the band entries in the group will signal the same group identifier in *txSwitchWithAnotherBand*. The first-listed band entry number in the group shall be used as identifier for the group. An UL group with only one band entry is not signaled in *txSwitchWithAnotherBand*.](#_Toc131702723)[For bands where the DL is impacted by an UL group with a single band entry, *txSwitchImpactToRx* shall indicate the band entry number of that UL band. For bands where the DL is impacted by an UL group with more than one band entry, *txSwitchImpactToRx* shall point to the UL group using the group identifier number (as defined by *txSwitchWithAnotherBand*).](#_Toc131702724)[Proposal 2 The behaviour of *txSwitchImpactToRx* and *txSwitchWithAnotherBand* should be clarified in 38.306.](#_Toc131702725) |

**Q2: Do companies agree with the proposal 1 in the** [R2-2303660](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303660.zip)**?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

**Q3: Do companies agree with the proposal 2 in the** [R2-2303660](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303660.zip)**?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

### Miscellaneous Correction on UE capability

[R2-2303877](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303877.zip) Miscellaneous Correction on UE capability-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.20.0 0895 - F NR\_newRAT-Core

[R2-2303878](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303878.zip) Miscellaneous Correction on UE capability-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.12.0 0896 - A NR\_newRAT-Core

[R2-2303879](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303879.zip) Miscellaneous Correction on UE capability-R17 ZTE Corporation, Sanechips CR Rel-17 38.306 17.4.0 0897 - A NR\_newRAT-Core

Two changes are included in the CRs, one is about the PUSCH MIMO transmission, and the other one is about the PDSCH RE resource mapping.

**Q4: Do companies agree with the first change in the** [R2-2303877](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303877.zip)/R2-2303878/R2-2303879?

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

**Q5: Do companies agree with the second change in the** [R2-2303877](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303877.zip)/R2-2303878/R2-2303879?

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

### PDCCH Blind Detection

[R2-2303880](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303880.zip) Correction on PDCCH Blind Detection-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.12.0 0898 - F NR\_L1enh\_URLLC

[R2-2303881](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303881.zip) Correction on PDCCH Blind Detection-R17 ZTE Corporation, Sanechips CR Rel-17 38.306 17.4.0 0899 - A NR\_L1enh\_URLLC

**Q6: Do companies agree with the change in the** R2-2303880/R2-2303881?

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

### Pusch Repetition TypeB

[R2-2304163](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304163.zip) Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-16 38.331 16.12.0 4059 - F NR\_L1enh\_URLLC-Core

[R2-2304164](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304164.zip) Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-17 38.331 17.4.0 4060 - A NR\_L1enh\_URLLC-Core

**Q7: Do companies agree with the change in the** R2-2304163/R2-2304164?

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

[R2-2304161](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304161.zip) Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-16 38.306 16.12.0 0901 - F NR\_L1enh\_URLLC-Core

[R2-2304162](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304162.zip) Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-17 38.306 17.4.0 0902 - A NR\_L1enh\_URLLC-Core

**Q7: Do companies agree with the change in the** R2-2304161/R2-2304162?

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

### NR-DC Capability

[R2-2304165](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304165.zip) Corrections on NR-DC capabilities Huawei, HiSilicon CR Rel-16 38.306 16.12.0 0903 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2304166](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304166.zip) Corrections on NR-DC capabilities Huawei, HiSilicon CR Rel-17 38.306 17.4.0 0904 - A LTE\_NR\_DC\_CA\_enh-Core

Two modifications were made for the *ca-parametersNRDC* and *asyncNRDC-r16* respectively in the CR.

**Q8: Do companies agree with the first change in the** [R2-2304165](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303877.zip)/R2-2304166?

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

**Q9: Do companies agree with the second change in the** [R2-2304165](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303877.zip)/R2-2304166?

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes or No** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

## 2.2 Part 2: Intended to progress discussion on agreeable parts

- To be updated after discussion on part 1 -

# 3 Conclusion

- To be updated after discussion on part 1 -

# 4 References

1. [R2-2302437](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2302437.zip) LS on clarification on impact of SRS antenna switching for TDD-FDD band combinations (R4-2303633; contact: Huawei) RAN4 LS in Rel-15 NR\_newRAT-Core To:RAN1 Cc:RAN2
2. [R2-2303660](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303660.zip) Handling of SRS Tx switching capability Ericsson discussion
3. [R2-2303877](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303877.zip) Miscellaneous Correction on UE capability-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.20.0 0895 - F NR\_newRAT-Core
4. [R2-2303878](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303878.zip) Miscellaneous Correction on UE capability-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.12.0 0896 - A NR\_newRAT-Core
5. [R2-2303879](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303879.zip) Miscellaneous Correction on UE capability-R17 ZTE Corporation, Sanechips CR Rel-17 38.306 17.4.0 0897 - A NR\_newRAT-Core
6. [R2-2303880](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303880.zip) Correction on PDCCH Blind Detection-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.12.0 0898 - F NR\_L1enh\_URLLC
7. [R2-2303881](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2303881.zip) Correction on PDCCH Blind Detection-R17 ZTE Corporation, Sanechips CR Rel-17 38.306 17.4.0 0899 - A NR\_L1enh\_URLLC

1. R2-2304161 Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-16 38.306 16.12.0 0901 - F NR\_L1enh\_URLLC-Core
2. [R2-2304162](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304162.zip) Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-17 38.306 17.4.0 0902 - A NR\_L1enh\_URLLC-Core
3. [R2-2304163](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304163.zip) Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-16 38.331 16.12.0 4059 - F NR\_L1enh\_URLLC-Core
4. [R2-2304164](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304164.zip) Correction on pusch-RepetitionTypeB capability Huawei, HiSilicon CR Rel-17 38.331 17.4.0 4060 - A NR\_L1enh\_URLLC-Core
5. [R2-2304165](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304165.zip) Corrections on NR-DC capabilities Huawei, HiSilicon CR Rel-16 38.306 16.12.0 0903 - F LTE\_NR\_DC\_CA\_enh-Core
6. [R2-2304166](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_121bis-e%5CDocs%5CR2-2304166.zip) Corrections on NR-DC capabilities Huawei, HiSilicon CR Rel-17 38.306 17.4.0 0904 - A LTE\_NR\_DC\_CA\_enh-Core