

3GPP TSG RAN Meeting #103

Maastricht, Netherlands, March 18-21, 2024



Tdoc Number: RP-240394
Agenda Item: 9.1.4.1
Source: CATT
Title: Views on Rel-19 UE RF topics
Document for: Discussion

CICT Mobile

- HPUE for CA and EN-DC
- Power boosting and MPR reduction
- 3Tx
- 6Rx

PC1.5 supporting

- Intra-band CA
 - Both contiguous and non-contiguous
 - Both with UL-MIMO and without UL-MIMO
- Inter-band CA
 - Both 2Tx and 3Tx

Our view:

- ✓ Supportive
- ✓ However, an efficient way should be developed to specify HPUE with consideration of UL configurations, UL Tx architecture, form-factors, duplex modes, higher power limit, Tx power backoff behavior, etc.

Power boosting & MPR reduction

- Study and specify requirements for power boosting with schemes
 - ACLR/EVM relaxing approaches
 - Enhanced PAPR reduction schemes
- Other proposals

Our view:

- ✓ Supportive to power boosting schemes considering:
 - ACLR/EVM relaxing approaches
 - Limit to single carrier operation
 - Making most of existing UE' s hardware capability in a controllable manner with little impacts on system performance.

3Tx

- Enhancements of 3Tx for band combinations of inter-band CA or EN-DC with two bands for handheld UE
- Support of high power UE and high power limit feature with 3Tx
- Specify UE RF requirements to support 3Tx with 3Layer UL MIMO and TxD (on single carrier)

Our view:

- ✓ Supportive to Moderator' s observation @ RAN#102:
 - For single carrier operation, 3Tx can be captured by Rel-19 UL-MIMO WI.
 - For band combination operation, it can be merged with HPUE WI.

6Rx as DL reception enhancement

- Study and specify 6Rx support on higher frequency bands for hand-held UEs
- Specify requirements for SRS antenna switching

Our view:

- ✓ Supportive
 - Including both FWA and handheld

[1] RP-233918, Moderator's summary for RAN4 Candidate RF/OTA Topics for Rel-19, RAN#102

万物互联的无限沟通引擎



中信科移动通信技术股份有限公司
CICT Mobile Communication Technology Co., Ltd.



<https://www.cictmobile.com>