

3GPP TSG RAN Meeting #103
Maastricht, Netherlands, March 18-21, 2024



Tdoc Number: RP-240392
Agenda Item: 9.3.2.4
Source: CATT, Nokia, Nokia Shanghai Bell, Lenovo, ZTE,
China Telecom, Qualcomm, Samsung, Apple, Meta, CBN,
China Broadnet, vivo
Title: Way forward on XR in DC
Document for: Discussion & Decision

CICT Mobile

Background-R18 discussion

- Discussion on support of XR in DC in RAN3#123
 - Status:
 - Majority companies think it is beneficial to support XR in DC. However, considering Rel-18 XR WI has been completed, and time limitation for evaluating specification impacts in R18 maintenance phase, companies would like to further discuss in Rel-19.
 - Conclusion(copy from RAN3#123 Chairman notes):
 - Not support DC in Rel-18
- Discussion on XR DC/split in RAN2#125:
 - RAN2 discussed how to report the UL burst arrival time to MCG/SCG in case of NR-DC and to target cell in case of handover
 - => [X091] RAN2 does not address this issue
 - RAN2 discussed which option to use for the DSR data volume calculation
 - => total amount of PDCP data volume and RLC data volume pending for initial transmission in the primary RLC entity and the split secondary RLC entity is used for comparison against legacy split threshold (i.e. same as BSR framework)

Observation 1: XR in DC can be supported in RAN2 while there is no specific discussion in RAN3 in Rel-18.

Potential RAN3 work if DC is supported

If XR is to be supported in DC, the following potential works in RAN3 are foreseen:

- Support PDU set based handling in XR DC:
- Support ECN marking in XR DC:
 - Support ECN marking request/response for MN/SN-terminated SCG/MCG bearers and split bearers.
 - Support delivering PDCP PDUs with PDU set UP information e.g., congestion information over Xn-U.
- Burst Arrival Time reporting in XR DC
- PSI Discard coordination in XR DC

Observation 2 : To support XR related features (e.g. PDU set handling, ECN marking for L4S) in DC, the work in RAN3 is needed while detailed signalling design needs further discussion.

Given that companies recognize the benefit of supporting XR related features in NR-DC scenario and RAN2 has already supported them, it is advisable to also extend this support to RAN3. Therefore, we have the following proposals:

Proposal 1: Confirm the support of XR related features in NR-DC scenario in Rel-19.

Proposal 2: Update Rel-19 WID to include RAN3 objective to support XR in NR-DC.

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>