3GPP TSG-RAN WG2 #131 R2-250xxxx

**Bengaluru, India, 25-29 August 2025**

**Agenda item:**8.18.1 (LTE-based 5G Broadcast)

**Source:** Qualcomm Incorporated

**Title:** [POST130][510][LTE Broadcast] RRC Open Issues

**Document for:** Information

# 1. Introduction

This document summarizes the RRC open issues for LTE 5G as identified during the following offline discussion.

* [POST130][510][LTE Broadcast] RRC running CR and open issues (Qualcomm)

Scope:

* Prepare and review the CR
* List open issues related to the CR

Intended outcome:

* Running CR for endorsement in the next meeting
* List of open issues for discussion at the next meeting

# 2. Remaining open issues

Based on the email discussion and previous RAN2 agreements, the following open issues have been identified.

**RRC-1: Rel-19 IEs for MBMS Interest Indication according to latest RAN1 agreements:**

Agreement

Rel-19 IE in MBMS Interest Indication message carries following parameters utilized for receiving Rel-19 LTE-based 5G Broadcast service(s):

* Frequency
* New values of sub-carrier spacing = {2.5 kHz, 1.25 kHz}
* New values for bandwidth = {n30, n35, n40}
* A new UE baseband resource Scaling factor (e.g., utilized soft buffer at the UE) used for receiving the time interleaved broadcast

**RRC-2: Time-interleaved PMCH transmission (as configured) exceeding UE’s soft buffer size or supported TBS according to latest RAN1 agreements:**

Agreement

In case the time interleaved PMCH transmission (as configured) exceeds a UE’s capability(/es) in terms of soft buffer size or maximum TBS supported in a TTI, the UE is not expected to receive the corresponding time interleaved PMCH transmission.

**RRC-3: FFS and Editor’s Noted in RRC running CR**

-- Editor’s Note: for the following parameter, exact candidate values are ‘ffs’ as they are still under discussion in RAN1 and not included in the RAN1 parameter list yet. Following is added as placeholder.

pmch-CyclicShiftAlpha-r19 ENUMERATED {alphaOne, alphaOther, ffs} OPTIONAL -- Need OR

***pmch-CyclicShiftAlpha***

Indicates parameter for cyclic shift for PMCH, see TS 36.211 [21] clause 6.5.1.

Editor’s Note: the description may need further update once RAN1 finalizes the parameter list.

**RRC-4: UE capability signaling**

According to UE Feature List provided by RAN1 in R2-2505011 LS on updated Rel-19 RAN1 UE features lists for LTE after RAN1#121 (R1-2504678; contact: NTT DOCOMO, AT&T).

# 3. References

1. RAN2#130 Meeting report
2. RP-250238: (RAN#107) Status report for WI LTE-based 5G Broadcast Phase 2
3. RP-251143: (RAN#108) Status report for WI LTE-based 5G Broadcast Phase 2
4. R2-2505011 LS on updated Rel-19 RAN1 UE features lists for LTE after RAN1#121 (R1-2504678; contact: NTT DOCOMO, AT&T).