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

**Bengaluru, India, 25th – 29th August 2025**

**Agenda item: 8.9.1**

**Source: Qualcomm Incorporated**

**Title: Open issues on Rel-19 IoT NTN UE capabilities**

**Document for: Discussion and Decision**

1. Introduction

This document lists the open issues for the Rel-19 IoT NTN TS 36.306 CR based on the following email discussion.

* [Post130][309][R19 IoT NTN] capability CR (Qualcomm)

Scope: discuss the running capability CR

Intended outcome: Endorsed CR and list of remaining open issues

Deadline: long

1. Discussion

In the running CR, there are few editor’s note added.

**Contention-based Msg3:**

Editor’s note: FFS on dependency on earlyData-UP-r15 and other capabilities such as support of the feature on non-anchor carrier. Name of parameter may be updated.

Editor’s note: FFS whether separate UE capability is needed for MT contention-based Msg3 EDT.

**Question 1**: For UP solution, network needs to provide NCC via RRC release message same as for UP EDT. For UP-based CB Msg3 transmission, should *nextHopChainingCount-r15* be reused or new NCC be introduced in RRC Release message?

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| Company | Yes/No | Comments |
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**Question 2**: Do we need a separate UE capability signaling for supporting MT contention-based Msg3 EDT?

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| Company | Yes/No | Comments |
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**Support of PWS:**

Editor’s note: FFS whether to add eMTC here as this is currently under discussion in SA1 and CT1.

Editor’s note: FFS if it is also applicable in TN (even though it is possible signaling wise, SA1 may not have any requirements yet).

Rapporteur thinks RAN2 can wait for CT1 decision to confirm whether eMTC can use existing optional PWS capability without signaling or needs new Rel-19 capability signaling.

**Question 3**: Is the support of PWS in NTN extended to TN for NB-IoT? If yes, please explain if other working groups needed to be informed.

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| Company | Yes/No | Comments |
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**Support of store and forward:**

Editor’s note: FFS whether this capability is needed given S&F mode capability is already exchanged between UE and MME.

**Question 4**: Does RAN (i.e., eNB) needs to know UE’s radio capability whether it supports S&F mode operation?

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| Company | Yes/No | Comments |
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**Question 5**: Any other issues for TS 36.306 CR on Rel-19 IoT NTN UE features?

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| Company | Issues | Comments |
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1. TBD.
2. Conclusion

Following observation and proposals are made:

Proposal 1 TBD.