**3GPP TSG-RAN WG2 Meeting #118-e R2-220**

**Electronic, 09 – 20 May 2022**

**Agenda item: 5.1.4.4**

**Source: Qualcomm Incorporated**

**Title: [AT118-e][ 022][NR1516] Idle/Inactive mode (Qualcomm)**

**Document for: Discussion and decision**

# Introduction

This document will report the discussion and outcome of Rel-15 and Rel-16 corrections for Idle and Inactive mode per the following email discussion:

* [AT118-e][022][NR1516] Idle/Inactive mode (Qualcomm)

      Scope: Treat [R2-2205946](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2205946.zip), [R2-2205945](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2205945.zip), R2-2204482, R2-2204826, R2-2205476, R2-2205742, R2-2205743

      Ph1 Determine agreeable parts, Ph2 for agreeable parts agree CRs (offline agreement, CB online only if necessary).

      Intended outcome: Report, Agreed CRs

      Deadline: Schedule 1

The Chair Notes has the following regarding Schedule 1:

Discussions with Deadline **Schedule 1**:

A **first round** with **Deadline for comments W1 Thursd May 12th 1200 UTC** to settle scope what is agreeable etc

A Final round with **Final deadline W2 Wednesd May 18th 1200 UTC** to settle details / agree CRs etc.

Additional deadlines check points etc if needed are defined by the Rapporteur of each discussion respectively. In case some parts of an email discussion need more time, doesn’t converge, need on-line treatment, then please contact the chair.

Please provide your contact information in the table below.

|  |  |
| --- | --- |
| **Company** | **Contact Name, Email** |
| Qualcomm | Ozcan Ozturk, oozturk@qti.qualcomm.com |
|  |  |

# Discussion

The following papers were submitted to RAN2#118-e for Rel-15 and Rel-16 corrections for Idle/Inactive mode:

[R2-2205946](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2205946.zip)   Miscellaneous Editorial Corrections           Qualcomm Incorporated CR       Rel-16           38.304  16.7.0   0250     -           D          TEI16

[R2-2205945](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2205945.zip)   Miscellaneous Editorial Corrections           Qualcomm Incorporated CR       Rel-17           38.304  17.0.0   0249     -           D          TEI17

Moved from AI6.0.3

[R2-2204482](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2204482.zip)   Reply LS to RAN2 on RRM relaxation in power saving (R4-2207038; contact: CATT)     RAN4   LS in    Rel-16  NR\_UE\_pow\_sav-Core To:RAN2

[R2-2204826](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2204826.zip)   Correction on RRM relaxation in PowSav  vivo      CR       Rel-16  38.304   16.7.0   0239     -           F          NR\_UE\_pow\_sav-Core

[R2-2205476](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2205476.zip)   Correction on RRM relaxation in PowSav  vivo      CR       Rel-17  38.304   17.0.0   0244     -           A          NR\_UE\_pow\_sav-Core

[R2-2205742](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2205742.zip)   Addressing inconsistency for RRM measurement rules      Ericsson, CATT CR   Rel-16  38.304  16.7.0   0247     -           F          NR\_UE\_pow\_sav-Core

[R2-2205743](file:///C%3A%5CUsers%5Cmtk65284%5CDocuments%5C3GPP%5Ctsg_ran%5CWG2_RL2%5CTSGR2_118-e%5CDocs%5CR2-2205743.zip)   Addressing inconsistency for RRM measurement rules      Ericsson, CATT CR   Rel-17  38.304  17.0.0   0248     -           A          NR\_UE\_pow\_sav-Core

Moved from 6.9

R2-2205946 and R2-2205945 are editorial corrections with CR category of Cat D. There doesn’t seem to be anything controversial with the changes.

**Question 1: Can R2-2205946 and R2-2205945 be agreed? If not, please justify your response**

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| --- | --- | --- |
| **Company** | **Response** | **Comments** |
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**Summary:**

**Proposal:**

The topic of Rel-16 RRM relaxation and alignment with RAN4 specifications were discussed in RAN2#115-e and an LS was sent to RAN4 in R2-2108877, requesting feedback on the discrepancy between low-mobility only case and both low-mobility and not-at-cell-edge case.

RAN4 has responsed to RAN2 in R2-2204482 which states that RAN4 has made the following changes to TS 38.133:

* When Srxlev ≤ SnonIntraSearchP or Squal ≤ SnonIntraSearchQ, the UE shall search for inter-frequency /E-UTRA inter-RAT frequency layers of higher priority at least every 1 hour
* When Srxlev > SnonIntraSearchP and Squal > SnonIntraSearchQ, the UE shall search for inter-frequency /E-UTRA inter-RAT frequency layers of higher priority at least every “Nlayers \* 1 hour”

There are two sets of 38.304 CRs on this topic: one from Vivo in R2-2204826 (Rel-16) and R2-2204827 (Rel-17 shadow) and one from Ericsson/CATT in R2-2205742 (Rel-16) and R2-2205743 (Rel-17 shadow).

The CRs are very similar. The second change for “if both *lowMobilityEvaluation* and *cellEdgeEvaluation* are configured” is same in both CRs. The first change for “if *lowMobilityEvaluation* is configured and *cellEdgeEvaluation* is not configured” is slightly different but they are functionally same and both refer to TS 38.133. Ericsson CR puts the reference in one sentence while Vivo CR has a separate sentence when “if *highPriorityMeasRelax* is configured”.

Both sets of CRs seem to be correct and the minor difference is a matter of editorial preference. The rapporteur thinks we can agree to one set of CRs.

**Question 2: Which sets of CRs do you support: R2-2204826/R2205476 or R2-2205742/R2-2205743? If neither, please justify your response.**

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| **Company** | **Response** | **Comments** |
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**Summary:**

**Proposal:**

# Conclusion

Based on the discussion and the feedback from companies above, the following are proposed for the corrections of Rel-15 and Rel-16 Idle/Inactive Mode: