**3GPP TSG-RAN WG2 Meeting #111e R2-20xxx**

**17 – 28 August 2020**

**Agenda item: 5.4.4**

**Source: Qualcomm Incorporated**

**Title: Report of [AT111-e][012][NR15] Idle mode**

**Document for: Discussion and decision**

# Introduction

This contribution will report the outcome of the following discussion on the CRs submitted for Idle/Inactive Mode operation for both Rel-15 and Rel-16:

* [AT111-e][012][NR15] Idle mode (QC)

Scope: Treat R[2-2007064](file:///G:\3GPP文档\2020年\RAN2%20111-e\Docs\R2-2007064.zip), R2-2007097, R[2-2007119](file:///G:\3GPP文档\2020年\RAN2%20111-e\Docs\R2-2007119.zip), R[2-2007120](file:///G:\3GPP文档\2020年\RAN2%20111-e\Docs\R2-2007120.zip), R2-2008040, R[2-2008041](file:///G:\3GPP文档\2020年\RAN2%20111-e\Docs\R2-2008041.zip), R2-2007963 (proponents to drive), Treat R2-2007963 (AI 6.1.3), include other corrections to be merged with rapporteur CR (if any)

Part 1: Decision whether to make corrections, identify agreeable parts. Identify Controversial issues for on-line treatment (if any).

Deadline: Aug 20, 0900 UTC.

Part 2: For agreeable parts, continuation to agree CRs.

Deadline: Aug 26, 0900 UTC.

# Discussion

## 2.1 Rapporteur CR for 36.304 (R2-2007064)

The 36.304 rapporteur Nokia has submitted the CR#085 for 36.304 which corrects several issues as follows:

1. Added NRS abbreviation
2. Changed timer for *altFreqPrioririties* from Txxx to T323
3. Changed various message names to *italics* font
4. “conditions are meet” changed to “conditions are met”
5. Changed condition to monitor GWUS not to be optional UE behaviour (i.e. removed parentheses)

The first four changes are editorial.

For the fifth change, there may be an overlap with the CRs which have more changes on GWUS in Agenda Item 7.3.2. For example, both R2-2007336 and R2-2007567 in AI 7.3.2. have changes on the text which is modified by R2-2007064. It is at least worth harmonizing this change with the outcome of the offline discussion “[AT111-e][305][NBIOT/eMTC R16] WUS related 36.304 corrections” in order to prevent conflicting changes.

**Do you agree to the changes proposed in R2-2007064? If not, please provide justification and/or alternative options.**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **CATT（Jayson）** | **Yes but** | **We’re fine with the first four changes, as for the last one, it’s better to be discussed together with offline [AT111-e][305].** |
| **Nokia** | **Proponent** | **Fine to also discuss 5) in 305 discussion** |
| **Apple** | **With modification** | **WI code should be corrected.** |
| **vivo** | **Yes** | **Fine with these editorial changes and for the fifth to align with [AT111-e][305].** |
| **Huawei** | **Yes but** | **There are some corrections to GWUS proposed which will be included in GWUS corrections CR in NB-IoT session, so should be removed from this general CR.** |
| **LG** | **Yes** | **We are also fine with first four change and the fifth change can be discussed in 305 offline discussion.** |
| **Lenovo** | **Yes** | Cover page: WI code “TEI16” should be added due to correction on T323. |
| **MediaTek** | **Yes** |  |
| **Samsung** | **Yes** | We are OK to agree the first four changes. And we share the comment from Rapporteur that the last change needs to be aligned with the outcome of the offline discussion [305]. |
| **Ericsson** | **Yes, except 5** | Topic 5 should be discussed under:   * [AT111-e][305][NBIOT/eMTC R16] WUS related 36.304 corrections (Qualcomm)   PS: do parenthesis indicate that something is optional? And GWUS is optional?:  4.3.4.195 groupWakeUpSignal-r16  This field indicates whether the UE supports Group WUS without group resource alternation for FDD in RRC\_IDLE as specified in TS 36.211 [17], TS 36.213 [22] and TS 36.304 [14]. This feature is only applicable if the UE supports ce-ModeA-r13 or if the UE supports any ue-Category-NB. |

**Summary:** All companies are fine with the first four changes. Lenovo suggests adding TEI16 to WI code, which makes sense since T323 timer was introduced in TEI16 as part of the alternative cell reselection for EN-DC. For the fifth change, based on the majority view, we will wait for the outcome of the email discussion 305.

**Proposal 1: The 36.304 CR#0805 in** **R2-2007064 with the first four changes is agreed. WI code TEI16 should be added on the cover page.**

**Proposal 2: The fifth change on GWUS in R2-2007064 can be re-visited if not covered by the outcome of the email discussion 305.**

## 2.2 Rapporteur CR for 38.304 (R2-2007963)

This is a Category D CR for 38.304 which has the following editorial corrections:

1. The reference to TS 22.011 is added for “list of forbiddgen TAs”.
2. Change the typeface of “additionalPmax and “NR-NS-PmaxList” to italics in 5.2.3.2.
3. Correct subscript for Qrxlevmin is not correct in two places in 5.2.3.2.
4. Replace “relaxed monitoring” with “relaxed measurement” in 5.2.4.9.1.

**Do you agree to the changes proposed in R2-2007963? If not, please provide justification and/or alternative options.**

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| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **CATT** | **Yes but** | **We’re fine with the changes except the first change as we think it’s sufficient only refer to TS 22.011.** |
| **Nokia** | **Yes** | **Also CATT proposal is fine – no strong opinion** |
| **Apple** | **Yes** | **If agreeable, we prefer to incorporate/merge the changes in R2-2007097 also in this rapporteur CR.** |
| **vivo** | **Yes** | **Ok for the four changes.** |
| **Huawei** | **Yes** |  |
| **LG** | **Yes** | **We are fine with the changes and WI code of R2-2007963 should be updated from TEI16.** |
| **Lenovo** | **Yes but** | Cover page issue: WI code should be corrected to “TEI16” (w/o dash).  We agree with CATT that reference to TS 22.261 can be removed and its reference [12] in subclause 2 can be voided. |
| **MediaTek** | **Yes** |  |
| **Samsung** | **Yes** |  |
| **Ericsson** | **Yes** |  |

**Summary:** The CR seems agreeable. Several companies suggested to only refer to 22.011 and remove the existing reference to 22.261. LG spotted a typo in the WI code.

**Proposal 3: Agree to 38.304 CR#0184 in R2-2007963 with the following changes:**

* **correct typo in WI code (remove dash)**
* **remove reference to 22.261.**

## 2.3 Srlev correction for inter-RAT (R2-2007119)

R2-2007119 (Rel-15 Cat F) and R2-2007120 (Rel-16 Cat A) for 36.304 introduce two missing parameters *q-QualMinOffsetCell and q-RxLevMinOffsetCell* in Srxlev calculation. These parameters are broadcast in NR SIB5 for inter-RAT cell reselection. However, they are not present in the Srxlev formula in 36.304.

The exact changes are copied here for reference:

|  |  |
| --- | --- |
| Qrxlevmin | Minimum required RX level in the cell (dBm)  If Qrxlevminoffsetcell is signalled in NR SIB5 in TS 38.331[37] for the concerned cell, this cell specific offset is added to achieve the required minimum RX level in the concerned cell. |
| Qqualmin | Minimum required quality level in the cell (dB)  If Qqualminoffsetcell is signalled is signalled in NR SIB5 in TS 38.331 [37] for the concerned cell, this cell specific offset is added to achieve the required minimum quality level in the concerned cell. |

**Do you agree to the above changes in LTE Srxlev calculation? If not, please provide justification and/or alternative options.**

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| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **CATT** | **Yes** | Qrxlevminoffsetcell /Qqualminoffsetcell is introduced in NR R15, but also applied to Inter-RAT cell reselection. It’s still unclear how these parameters are used in 36.304, so we’re fine with the clarification. |
| **Nokia** | **Proponent** |  |
| **Apple** | **Agree** | **If the CR is disagreed, the two parameters (*q-QualMinOffsetCell and q-RxLevMinOffsetCell)* in NR SIB5 for inter-RAT cell selection will not be used by the UE for cell reselection from NR to LTE.** |
| **vivo** | **Yes** | **It is reasonable to use these two parameters to apply a more precise cell offset in inter-RAT cell reselection.** |
| **Huawei** | **Yes, but** | **1) The consequence if not approved is a bit severe if this is a "clarification" CR only. Either this or the CR title needs to be updated - is it a critical correction or just clarification?**  **2) The field descriptions in 38.331 refer to 38.304 so that should be corrected to 36.304. Maybe this can be fixed in 38.331 rapporteur CR if there’s one?**  **3) We have some suggestion on the wording:**  Minimum required RX level in the cell (dBm)  When the UE is camped on an NR cell and evaluating an E-UTRAN cell, and Qrxlevminoffsetcell is signalled in NR SIB5 in TS 38.331[37] for the E-UTRAN cell, this cell specific offset is added to achieve the required minimum RX level in the E-UTRAN cell.  Minimum required quality level in the cell (dB)  When the UE is camped on an NR cell and evaluating an E-UTRAN cell, and Qqualminoffsetcell is signalled is signalled in NR SIB5 in TS 38.331 [37] for the E-UTRAN cell, this cell specific offset is added to achieve the required minimum quality level in the E-UTRAN cell.**We understand that the current text has some implicit reference to the scenario where “UE is camped on an NR cell and evaluating an E-UTRAN cell”, but we still prefer to make it clear so that the UE will not feel confused why NR SIB5 is referred to when evaluating an LTE cell.**  **This enhancement is introduced in NR SIB3/4/5 and now affecting LTE spec. However, it has no impact on SIB24 of LTE, only SIB5. Generally, SIB24 is closely related to NR whereas for SIB5 it is not so straightforward. We’re ok to leave SIB24 as it is and prefer to make the description in SIB5 easier to understand.** |
| **LG** | **Yes** | **We are fine with the change and Huawei’s text proposal seems better to directly show the intention of the sentence. (Editorial change seems needed in Huawei’s text proposal).** |
| **Lenovo** | **No** | Cover page: why is NE-DC/NR-DC listed in “Impacted 5G architecture options”? The CR refers to inter-RAT cell reselection from NR SA to LTE.  We prefer a simpler solution by correcting the concerned field descriptions in 38.331 SIB5 as the current descriptions are not correct, see below.  ***q-QualMinOffsetCell***  Cell specific quality level offset to Qqualmin in TS 36.304 [7]. Value in dB.  ***q-RxLevMinOffsetCell***  Cell specific Rx level offset to Qrxlevmin in TS 36.304 [7]. Value in dB. |
| **MediaTek** | **Yes, but** | * We are not sure if NR parameter needs to be included in LTE spec, but we a fine with such clarifications. * If this CR is agreed, we may also need to include parameters in LTE SIB24 in 38.304? |
| **Samsung** | **Yes** | Minor comment: the spacing error in the description of Qrxlevmin i.e. TS 38.331[37] in R2-2007119 can be fixed. |
| **Qualcomm** | **Yes** | Proponent |
| **Ericsson** | **Disagree** | **Similar proposals were discussed during last meeting for 38.304, but not agreed:**  [R2-2004764](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_110-e/Docs/R2-2004764.zip) Clarification on Pcompensation for IRAT Cell Selection Criterion Apple CR Rel-15 38.304 15.6.0 0166 - F NR\_newRAT-Core  [R2-2004765](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_110-e/Docs/R2-2004765.zip) Clarification on Pcompensation for IRAT Cell Selection Criterion Apple CR Rel-16 38.304 16.0.0 0167 - A NR\_newRAT-Core   * [024] Both Not Pursued   **For the proposed 36.304 changes we have similar view, that it is not needed, because it already says in 36.304:** 5.2.3.6 NR case in Cell Selection The cell selection criteria and procedures in NR are specified in TS 38.304 [38]. |

**Summary:** All companies except Lenovo agree with the intention.

Lenovo suggests correcting this in 38.331. However, these parameters are not cited in 36.304 which was the reasoning of this CR. However, Lenovo suggestion shows that the current reference to 38.304 in SIB5 is not correct so a separate 38.331 CR is needed for this. Lenovo also thinks the impacted architecture should not include NE-DC and NR-DC which seems correct since there is no DC in Idle/Inactive mode in Rel-16.

Huawei suggests a rewording of the text to emphasize that the UE is camping on NR and doing inter-RAT reselection. This can be regarded as obvious as the UE is doing an E-UTRA calculation based on a parameter from an NR SIB but it seems harmless to add this for further clarification.

Huawei also suggests to either modify the inter-operability or the title for consistency. The latter seems easier.

Mediatek mentions that a similar 38.304 CR for LTE SIB24 may be needed. If there are similar missing parameters, this should be considered in the next meetings.

Rapporteur spotted that there is typo in WI code that it should be “NR\_newRAT-Core”.

**Proposal 4: Agree to the 36.304 CR#0806 in R2-2007119 with the following changes:**

* **Add the additional text suggested by Huawei**
* **Remove NE-DC and NR-DC from impacted architectures**
* **Change “clarification” to “correction” in the CR title**
* **Correct typo (missing space before bracket) in reference to 38.331**
* **Correct typo in WI code (use “newRAT”)**

It is also clear that the references for Idle mode specs in 38.331 are not correct (as indicated above by Lenovo). It would be good to agree to fix this.

**Proposal 5: Change the references from 38.304 to 36.304 in the field descriptions of *q-QualMinOffsetCell* and *q-RxLevMinOffsetCell* in 38.331.**

## 2.4 Qrxlevmin correction in SIB24 (R2-2008040)

R2-2008040 (Rel-15 Cat F) and R2-2008041 (Rel-16 Cat A) for 36.304 corrects the values of *q-RxLevMin* and *q-RxLevMinSUL* broadcast in LTE SIB24 for inter-RAT cell re-selection. The values for these two parameters are signaled as INTEGER (-70..-22). However, the corresponding dBm values are not stated in the field descriptions. The changes are copied here for reference:

|  |
| --- |
| ***q-RxLevMin***  Parameter "Qrxlevmin" in TS 36.304 [4], applicable for NR neighbour cells. The actual value of this field is calculated from Qrxlevmin = field value \* 2 [dBm]. |
| ***q-RxLevMinSUL***  Parameter "QrxlevminSUL" in TS 38.304 [92], applicable for NR neighbouring cells. The actual value of this field is calculated from QrxlevminSUL = field value \* 2 [dBm]. |

**Do you agree to the above changes to the field descriptions in SIB24? If not, please provide justification and/or alternative options.**

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| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **CATT** | **Maybe no** | We think the following IE definition is already clear enough*Q-RxLevMin*  The IE *Q-RxLevMin* is used to indicate for cell selection/ re-selection the required minimum received RSRP level in the (E-UTRA) cell. Corresponds to parameter Qrxlevmin in TS 36.304 [4]. Actual value Qrxlevmin = field value \* 2 [dBm]. |
| **Nokia** | **With modification** | **the same field is used in at least two places. Better to introduce separate IE and in the IE description have this “\*2” similarly as in NR** |
| **Apple** | **With modification** | 1. **The sentence can be updated as follow:**   **Actual value Qrxlevmin = field value \* 2 [dBm].**   1. **In *q-RxLevMin* filed description, the reference spec should be updated to TS 38.304.** |
| **vivo** | **No strong view** | **The text either by Qualcomm or Apple is acceptable to us.** |
| **Huawei** | **Yes** | **The change is reasonable. The similar description should be added to q-QualMin, indicating that the actual value = field value [dB] (in this case no need to be multiplied by 2).** |
| **LG** | **Yes** | **We prefer simpler expression suggested by Apple.** |
| **Lenovo** | **Yes with changes** | Cover page: WI code should be corrected “NR\_newRAT-Core” as SIB24 was introduced as part of NR SA.  On the changes in the field descriptions: we are fine with the changes as IE type of both fields has been defined as Integer value range and not as IE Q-RxLevMin. Furthermore, we prefer the shortened form as proposed by Apple. Reason is that the QC proposal is misleading as the actual value should apply to the referenced parameter in 36.304/38.304 or not to the field itself.  In this context, we spotted an issue in the description of q-RxLevMinSUL: the parameter "QrxlevminSUL" does not exist neither in TS 36.304 nor in TS 38.304 [92]. In NR spec, 5.2.3.2 it is stated that Qrxlevmin is obtained from q-RxLevMinSUL if present, in SIB1, SIB2 and SIB4. Therefore, "QrxlevminSUL" should be replaced by "Qrxlevmin". |
| **MediaTek** | **Yes** | Agree with Apple. |
| **Samsung** | **Yes** | Agree with Apple |
| **Ericsson** | **Agree** | This needs to be clarified, and there are indeed two possible ways to do this, i.e. introduce a new IE (Qrxlevmin) and clarify for the IE that the value should be multiplied with 2. Or clarified in the field description that the value should be multiplied with 2. We do not have a strong view, which alternative to use. We agree with the editorial suggestion from Apple in case the field description is updated.  This is a NBC change, but it does not create a true inter-operability problem, but it influences the performance, i.e. the UE may view the cell not suitable, while the cell in reality is suitable for the UE to camp on. |

**Summary**: CATT points out that this conversion is already done in the IE definition. Nokia also states that a new IE should be defined instead but the IE is already in the specification. Other companies seem fine with the intention. Apple suggests a change in the description which is more in line with the specification which is also supported by other companies. Apple also indicates the wrong reference to 36.304 which should be 38.304.

Lenovo states that there is no QrxlevminSUL in 38.304. However, 38.304 does refer to the actual field name *q-RxLevMinSUL* so this is correct. Lenovo also points out that the WI code should be changed to NR\_newRAT-Core.

**Proposal 6: Agree to the 36.304 CR#4420 in R2-2008040 (and Rel-16 shadow in R2-2008041) with the following changes:**

* **Use the text “Actual value Qrxlevmin = field value \* 2 [dBm].” for *q-RxLevMin* and similar for *q-RxLevMinSUL***
* **Change the reference from 36.304 to 38.304**
* **Change WI code to “NR\_newRAT-Core”**

## 2.5 Suitable cell definition (R2-2007097)

R2-2007097 (Cat D) suggests editorial corrections as follows:

1. Added 3GPP TS 22.011 to reference list
2. In the definition of “suitable cell”, added “for Romaing” to the list of “Forbidden Tracking Areas”.
3. The reference to TS 22.261 is replaced by the reference to TS 22.011
4. “Registration area” changes to “tracking area” in the description of exception case in clause 4.5

The changes 1 and 3 are already covered in R2-2007963.

The remaining two changes are copied here for reference as below:

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| --- |
| **suitable cell:**  A cell is considered as suitable if the following conditions are fulfilled:  - The cell is part of either the selected PLMN or the registered PLMN or PLMN of the Equivalent PLMN list;  - The cell selection criteria are fulfilled, see clause 5.2.3.2.  According to the latest information provided by NAS:  - The cell is not barred, see clause 5.3.1;  - The cell is part of at least one TA that is not part of the list of "Forbidden Tracking Areas for Roaming" (TS 22.011 [xx]), which belongs to a PLMN that fulfils the first bullet above.  **reserved cell:**  A cell is reserved if it is so indicated in system information, as specified in TS 38.331 [3].  Following exception to these definitions are applicable for UEs:  - if a UE has an ongoing emergency call, all acceptable cells of that PLMN are treated as suitable for the duration of the emergency call.  - camped on a cell that belongs to a tracking area that is forbidden for regional provision of service; a cell that belongs to a tracking area that is forbidden for regional provision service (TS 23.122 [9], TS 24.501 [14]) is suitable but provides only limited service. |

In 24.501, the following is stated in Section 5.3.13:

|  |
| --- |
| The UE shall store a list of "5GS forbidden tracking areas for roaming", as well as a list of "5GS forbidden tracking areas for regional provision of service". Within the 5GS, these lists are managed independently per access type, i.e., 3GPP access or non-3GPP access. These lists shall be erased when  a) the UE is switched off or the UICC containing the USIM is removed or an entry of the "list of subscriber data" with the SNPN identity of the current SNPN is updated; and  b) periodically (with a period in the range 12 to 24 hours). |

Therefore, the proposed changes do align 38.304 and 24.501. It should be noted that 36.304 also uses the term “registration area that is forbidden for regional provision of service” which may need to be corrected.

If these changes are agreed, they should be merged with the Rapporteur CR for 38.304. The same can also be done for 36.304.

**Do you agree to the changes 2 and 4 above for camping on forbidden cells? If not, please provide justification and/or alternative options.**

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| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **CATT** | **No strong view** |  |
| **Nokia** |  | **Seems technically correct. If agreed probably better to have same in release 16 36.304 – but there should not be need to propagate this to earlier releases as this is purely editorial. Considering this change does not seem to be critical as anyway even for NR only release 16 is being proposed.** |
| **Apple** | **Agree** | **1. For change 2: please note that this change just aligns the suitable cell definition to the text in TS 36.304, as “forbidden tracking area for roaming” also used in clause 4.3 in 36.304 as below:**  ***According to the latest information provided by NAS:***  ***- The cell is not barred, see clause 5.3.1;***  ***- The cell is part of at least one TA that is not part of the list of "forbidden tracking areas for roaming" TS 22.011 [4], which belongs to a PLMN that fulfils the first bullet above;***  **Otherwise, if “for roaming” is not added, a UE might also consider the “Forbidden Tracking Areas for regional provision of service” during Cell suitability check and would re-select to a (potentially weaker) cell of another TA which is violating the intention of the concept of “regional provision of service” where the UE shall not trigger any attempts to leave the current camped cell neither on AS nor on NAS level.**  **2. For change 4, the term used in AS and NAS spec should be aligned.** |
| **vivo** | **Agree** | **We are fine with the changes after further explanation by Apple.** |
| **Huawei** | **Go to the rapporteur CR** | **This is a resubmission of R2-2004752. In the previous meeting it was agreed that “Contents is agreeable but editorial, to be merged into 38304 rapporteur CRs at next meeting, these CRs are not agreed.”** |
| **LG** | **Agree** | **Agree to align the terms with NAS spec which are changed in NR.** |
| **Lenovo** | **No** | To change 2: we understand that the phrase “list of Forbidden Tracking Areas” is a general placeholder for "list of 5GS forbidden TAs for roaming" in case of NR cell and "list of forbidden TAs for roaming" in case of LTE cell. Therefore, we see no need to add “roaming”.  To change 4: Registration area includes one or more tracking areas. Therefore, the concerned sentence should be understood as a generic sentence and thus, there is no need for any change. |
| **MediaTek** | **Yes** |  |
| **Samsung** | **Maybe no** | 1/ Regarding the change of suitable cell definition, we already specified the exception case for regional provision of service how to treat cell categories. So UE behaviour is exactly the same w/ or w/o addition of "for Roaming". If majority think the change is agreeable, it can be merged to Rap CR.  2/ Regarding the change of tracking area, we interpret the current text as the **concerned cell** within a registration area is **forbidden for regional provision of service.** So, nothing seems broken in the current specification. Again, if majority think the change is agreeable, it can be merged to Rap CR. |
| **Ericsson** | **Up to rapporteur** | This should have discussed this with the rapporteur before the meeting, as discussed during last meeting. We leave it to the rapporteur to decide what to include from the Apple CR:  Cell selection  [R2-2004752](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_110-e/Docs/R2-2004752.zip) Correction on suitable cell definition Apple CR Rel-15 38.304 15.6.0 0162 - F NR\_newRAT-Core  => Revised in R2-2006249  R2-2006249 Correction on suitable cell definition Apple CR Rel-15 38.304 15.6.0 0162 1 F NR\_newRAT-Core  [R2-2004753](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_110-e/Docs/R2-2004753.zip) Correction on suitable cell definition Apple CR Rel-16 38.304 16.0.0 0163 - A NR\_newRAT-Core  => Revised in R2-2006250  R2-2006250 Correction on suitable cell definition Apple CR Rel-16 38.304 16.0.0 0163 1 A NR\_newRAT-Core  - [024] Half time: The discussion can continue  [024] Contents is agreeable but editorial, to be merged into 38304 rapporteur CRs at next meeting, these CRs are not agreed. |

**Summary:** Lenovo doesn’t see a need to add “roaming” and using “registration area” also does not create any problems. Samsung seems to have similar opinion. Other 6 companies are not against the changes. Huawei suggests including these in the rapporteur CR.

It was also the majority opinion in RAN2#110e that these changes are fine, but they are not technical corrections and thus can be included in a Rapporteur CR.

**Proposal 7: Add the following changes in R2-2007097 to the 38.304 rapporteur CR:**

* **In the definition of “suitable cell”, add “for Roaming” to the list of “Forbidden Tracking Areas”.**
* **“Registration area” changes to “tracking area” in the description of exception case in clause 4.5**

**If change 4 is accepted, do you agree to also applying this to 36.304 to be introduced in the Rapporteur CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **Apple** | **Agree** | **We are fine to merge the change 4 in the 36.304 Rapporteur CR (R2-2007064).** |
| **vivo** | **Agree** |  |
| **MediaTek** | **Yes** |  |
| **Ericsson** | **Yes** |  |

**Summary:** Three companies who responded are fine with doing the same for LTE specification. Note that only the second change is needed for 36.304 since the part for “roaming” is already correct in 36.304

**Proposal 8: Introduce the following change in 36.304 rapporteur CR:**

* **“Registration area” changes to “tracking area” in the description of exception case in clause 4.5**

# Conclusion

Based on the feedback received, the following are proposed regarding the corrections for Idle/Inactive operation in LTE and NR:

**Proposal 1: The 36.304 CR#0805 in** **R2-2007064 with the first four changes is agreed. WI code TEI16 should be added on the cover page.**

**Proposal 2: The fifth change on GWUS in R2-2007064 can be re-visited if not covered by the outcome of the email discussion 305.**

**Proposal 3: Agree to 38.304 CR#0184 in R2-2007963 with the following changes:**

* **correct typo in WI code (remove dash)**
* **remove reference to 22.261.**

**Proposal 4: Agree to the 36.304 CR#0806 in R2-2007119 with the following changes:**

* **Add the additional text suggested by Huawei**
* **Remove NE-DC and NR-DC from impacted architectures**
* **Change “clarification” to “correction” in the CR title**
* **Correct typo (missing space before bracket) in reference to 38.331**
* **Correct typo in WI code (use “newRAT”)**

**Proposal 5: Change the references from 38.304 to 36.304 in the field descriptions of *q-QualMinOffsetCell* and *q-RxLevMinOffsetCell* in 38.331.**

**Proposal 6: Agree to the 36.304 CR#4420 in R2-2008040 (and Rel-16 shadow in R2-2008041) with the following changes:**

* **Use the text “Actual value Qrxlevmin = field value \* 2 [dBm].” for *q-RxLevMin* and similar for *q-RxLevMinSUL***
* **Change the reference from 36.304 to 38.304**
* **Change WI code to “NR\_newRAT-Core”**

**Proposal 7: Add the following changes in R2-2007097 to the 38.304 rapporteur CR:**

* **In the definition of “suitable cell”, add “for Roaming” to the list of “Forbidden Tracking Areas”.**
* **“Registration area” changes to “tracking area” in the description of exception case in clause 4.5**

**Proposal 8: Introduce the following change in 36.304 rapporteur CR:**

* **“Registration area” changes to “tracking area” in the description of exception case in clause 4.5**

# Contact information

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