**3GPP TSG-RAN WG2 Meeting #109bis R2-200xxxx**

**Online, April 2020**

**Agenda Item: 6.11.3**

**Source: MediaTek Inc. (Rapporteur)**

**Title: Outcome of [AT109bis-e][504][PowSav] CP/UE assistance Open and ASN.1 Issues**

**Document for: Discussion and decision**

1 Introduction

As all issues raised in the documents submitted to section 6.11.3 were concluded in [1], this document focusses solely on the remaining open class 3 RIL issues that were raised in [2], [3]. Please note: class 2 RIL issues will be discussed as part of the ASN.1 review thread according to the proposed conclusion in [2]

2 Class 3 RIL issues

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| ID | Section | Description (detailed in [3]) | Proposed Change | Comments | Proposed Conclusion |
| Z110 | 5.7.4.3 Actions related to transmission of UEAssistanceInformation message | The fields inside drx-Preference and minSchedulingOffsetPreference are optional. | Add “optionally” before the setting of preferredDRX-LongCycle, preferredDRX-InactivityTimer, preferredDRX-ShortCycle, preferredDRX-ShortCycleTimer, preferredK0-SCS-15kHz, preferredK0-SCS-30kHz, preferredK0-SCS-60kHz, preferredK0-SCS-120kHz, preferredK2-SCS-15kHz, preferredK2-SCS-30kHz, preferredK2-SCS-60kHz, preferredK2-SCS-120kHz. | [Rapporteur] – The text will be updated to reflect the delta signalling agreements. This issue will be addressed as part of that change. |  |
| N024 | – SIB2 | This is unnecessarily complicated: The intention seems to indicate whether “and” or “or” is used with the conditions when both evaluation criteria are present, and then the condition becomes “A OR notB” or “A AND notB”. This could be simply replaced by simple enumeration of “and” and “or” without a loss of generality. Reading the description in 38.304, it seems that the field is not even clearly used there: The text checks usage of “and” and if that doesn’t match, uses “or”. Therefore, this whole field is about whether to use “and” in the first place – otherwise UE uses either of the conditions. Therefore, the field could simply be ENUMERATED{true} for the usage of “and”, with “or” being used if the field is not configured. | Use the following: combineRelaxedMeasConditions-r16 ENUMERATED {true} OPTIONAL, -- Cond MultRelaxCriteria with the field description as relaxedMeasCondition When both lowMobilityEvaluation and cellEdgeEvaluation are present in SIB2, this parameter configures whether UE combines the two conditions when determining whether to relax measurements (see TS 38.304 [20], clause 5.2.4.X.0). | [Rapporteur] – Nokia’s solution is clear and elegant. Suggest to accept this change. An equivalent update to 38.304 will be needed as a result |  |
| N023 | – CellGroupConfig | These field descriptions are very hard to read: The whole “inside/outside active time” is not easily understood (nor explained elsewhere in RRC), so suggest to simpälify the field descriptions. | Suggest to use the following simpler field descriptions: outsideActiveTimeToAddModList List of SCell groups to be added or modified for the use of the “Dormancy outside active time” as specified in TS 38.213 [13]. withinActiveTimeToAddModList List of SCell groups to be added or modified for the use of the “Dormancy within active time” as specified in TS 38.213 [13]. | [Rapporteur] – Not related to power saving, rather this belongs to DCCA discussions. Has been flagged to Hakan. | No action |
| S403 | – PhysicalCellGroupConfig | “when the drx-onDurationTimer does not start” is ambiguous because usually it does not start. It is meant to be “should have started but does not start” | Indicates the UE to transmit periodic L1-RSRP report(s) when if the drx-onDurationTimer does not start because of DCI format 2-6 (see TS 38.321 [3], clause 5.7). If the field is absent, the UE does not transmit periodic L1-RSRP report(s) when the drx-onDurationTimer does not start. | [Rapporteur] – The reference to the MAC specification already clarifies ‘when the drx-onDurationTimer does not start’. We typically don’t duplicate conditions in different specifications. |  |
| S404 | – PhysicalCellGroupConfig | Same issue as S403. “when the drx-onDurationTimer does not start” is ambiguous because usually it does not start. It is meant to be “should have started but does not start” | Indicates the UE to transmit periodic CSI report(s) when if the drx-onDurationTimer does not start because of DCI format 2-6 (see TS 38.321 [3], clause 5.7). If the field is absent, the UE does not transmit periodic CSI report(s) when the drx-onDurationTimer does not start. | [Rapporteur] – Same as S403 |  |
| S406 | – UEAssistanceInformation | The Power saving information should be grouped alike for every UE assistance reporting feature | Create an IE as shown below PowerSavingAssistance-r16 ::= SEQUENCE {     drx-Preference-r16                  DRX-Preference-r16                  OPTIONAL,     maxBW-Preference-r16                MaxBW-Preference-r16                OPTIONAL,     maxCC-Preference-r16                MaxCC-Preference-r16                OPTIONAL,     maxMIMO-LayerPreference-r16         MaxMIMO-LayerPreference-r16         OPTIONAL,     minSchedulingOffsetPreference-r16   MinSchedulingOffsetPreference-r16   OPTIONAL,     releasePreference-r16               ENUMERATED {idle, inactive, idleOrInactive}         OPTIONAL,     nonCriticalExtension                SEQUENCE {}                         OPTIONAL } | [Rapporteur] – While this issue was marked as class 2, we have already discussed this in the first session and agreed that ‘No further grouping is considered.’ | Rejected |
| Q003 | – SIB2 | The entire structure, use of need codes and presence conditions are confusing. It is our understanding that: In case of low mobility based relaxation, s-SearchDeltaP-r16 is mandatory present and t-SearchDeltaP-r16 is optional. In case of not-at-cell-edge based relaxation, at least one of s-SearchThresholdP-r16 and s-SearchThresholdQ-r16 shall be configured. We should capture too many logics here when they are sufficiently clear from 38.304, e.g. the relaxed measurement requires either low mobility based or not-at-cell-edge based condition to be configured. | Make the following changes - s-SearchDeltaP-r16 > mandatory present. - t-SearchDeltaP-r16 > need R - lowMobilityEvalutation-r16 > need R (remove the condition) - cellEdgeEvalutation-r16 > Need R (remove the condition) | [Rapporteur] – While the issue was marked as class 2, some of the aspects (s-SearchThreshold) were discussed in the PS WI. No strong view on the suggested need code changes. Unclear why s-SearchDeltaP is considered as mandatory while t-SearchDeltaP is considered optional. |  |

3 Conclusion

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4 References

1. R2-2003127 - Summary of [Post109e#43][PowSav] UE Assistance and RRC open issues
2. R2-2003310 - RIL list TS 38.331 Rel-16 ASN.1 review file, phase 1
3. R2-2003309 - TS 38.331 Rel-16 ASN.1 review file, phase 1