3GPP TSG-RAN WG4 Meeting #102-e R4-2206911

Electronic Meeting, 21st Feb. – 3th Mar., 2022

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.133** | **CR** | **-** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | CR on TS38.133 for applicability of RLM measurement relaxation | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | MediaTek Inc., Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_UE\_pow\_sav\_enh-Core | | | | |  | ***Date:*** | | | 2022-02-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | RAN4 agreed to define requirements for radio link monitoring relaxation | | | | | | | | |
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| ***Summary of change:*** | | To introduce the applicability of RLM measurement relaxation | | | | | | | | |
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| ***Consequences if not approved:*** | | The applicability of RLM measurement relaxation in connected mode power saving are missing | | | | | | | | |
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| ***Clauses affected:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS 38.533 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

>>>>>Start of Change 1<<<<<

#### 8.1.1.1 Introduction of Requirement on Radio Link Monitoring for UE Configured with Relaxed Measurement Criteria

For the UE supports [connected mode power saving] and configured with explicit signaling [TBD]:

* when the UE is not performing intra-band carrier aggregation configured with CSI-RS based RLM and CSI-RS based BFD on SCell, and
  + UE has fulfilled good serving cell quality criterion defined in [TBD] if the low mobility criteria is not configured, or
  + UE is also configured with low mobility criterion defined in [TBD] and UE has fulfilled both good serving cell quality criterion defined in [TBD] and low mobility criterion defined in [TBD].
* when the UE is performing intra-band carrier aggregation configured with CSI-RS based RLM and CSI-RS based BFD on SCell, and
  + UE has fulfilled good serving cell quality criterion defined in [TBD] for CSI-RS based RLM on SpCell and for CSI-RS based BFD on serving cell if the low mobility criteria is not configured, or
  + the UE is configured with low mobility criterion defined in [TBD], and UE has fulfilled both good serving cell quality criterion defined in [TBD] and low mobility criterion defined in [TBD] for CSI-RS based RLM on SpCell and for CSI-RS based BFD on a serving cell.

The UE is allowed to apply the relaxed requirements defined in clause 8.1.2.[4] for SSB based radio link monitoring and the relaxed requirements defined in clause 8.1.3.[4] for CSI-RS based radio link monitoring; otherwise, UE shall apply the requirements defined in clause 8.1.2.2 for SSB based radio link monitoring and the requirements defined in clause 8.1.3.2 for CSI-RS based radio link monitoring.

The UE is not allowed to relax RLM measurements and apply the relaxed radio link monitoring provided that at least one of the following conditions is met:

* The UE sends out-of sync indications to the higher layers,
* The UE has triggered T310 timer

>>>>>End of Change 1<<<<<