**3GPP TSG-RAN WG4 Meeting #102-e *R4-2205207***

**Electronic Meeting, February 21 – March 3, 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.133** | **CR** | - | **rev** |  | **Current version:** | **16.10.0** |  |
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| *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:***  | Correction on measurement requirements in relaxed measurement  |
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| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_UE\_pow\_sav-Core |  | ***Date:*** | 2022-02-14 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-16 |
|  | *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 canbe 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:*** | LS reply from RAN2[R2-2108877] identified an issue that when UE is configured with both lowMobilityEvaluation criterion and cellEdgeEvaluation criterion, and has also fulfilled both criteria, when Srxlev > SnonIntraSearchP and Squal > SnonIntraSearchQ, whether the change (1 hour -> 1 hour \* Nlayers) should also apply to. RAN4 think it is reasonable to accept this change. |
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| ***Summary of change:*** | When UE is configured with both lowMobilityEvaluation criterion and cellEdgeEvaluation criterion, and has also fulfilled both criteria, * When Srxlev ≤ SnonIntraSearchP or Squal ≤ SnonIntraSearchQ,
	+ the UE shall search for, measure and evaluate inter-frequency layers of higher, equal or lower priority at least every 1 hour
	+ the UE shall search for, measure and evaluate inter-RAT E-UTRAN layers of higher or lower 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 K2\*Thigher\_priority\_search where
	+ Thigher\_priority\_search = (60 \* Nlayers) in clause 4.2.2.7 of 38.133,
	+ Nlayers is the total number of higher priority NR and E-UTRA carrier frequencies broadcasted in system information,
	+ K2 = 60.
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| ***Consequences if not approved:*** | The specification is not correct. |
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| ***Clauses affected:*** |  4.2.2.10.4; 4.2.2.11.4 |
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|  | **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:*** |  |

----------------------------------------------------- Beginning of Change 1 ------------------------------------------------------------

##### 4.2.2.10.4 Measurements for UE fulfilling low mobility and not-at-cell edge criterion

This clause contains requirements for measurements on inter-frequency NR cells provided that:

- T331 timer is not running for EMR measurements on inter-frequency NR carrier, and

- UE is configured with both *lowMobilityEvaluation* [2] criterion and *cellEdgeEvaluation* [2] criterion, and

- Has also fulfilled both criteria

When Srxlev ≤ SnonIntraSearchP or Squal ≤ SnonIntraSearchQ, the UE shall search for, measure and evaluate inter-frequency layers of higher, equal or lower priority at least every 1 hour.

When Srxlev > SnonIntraSearchP and Squal > SnonIntraSearchQ, the UE shall search for inter-frequency layers of higher priority at least every K2\*Thigher\_priority\_search where Thigher\_priority\_search is described in clause 4.2.2.7 and K2=60.

In this case the UE is not required to meet Tdetect,NR\_Inter, Tmeasure,NR\_Inter and Tevaluate,NR\_Inter as defined in Table 4.2.2.4-1.

------------------------------------------------------------- End of change 1 ------------------------------------------------------------

----------------------------------------------------- Beginning of Change 2 ------------------------------------------------------------

##### 4.2.2.11.4 Measurements for UE fulfilling low mobility and not-at-cell edge criterion

This clause contains requirements for measurements on inter-RAT E-UTRAN cells provided that:

- T331 timer is not running for EMR measurements on inter-RAT E-UTRAN, and

- UE is configured with both *lowMobilityEvaluation* [2] criterion and *cellEdgeEvaluation* [2] criterion, and

- has also fulfilled both criteria

When Srxlev ≤ SnonIntraSearchP or Squal ≤ SnonIntraSearchQ, the UE shall search for, measure and evaluate inter-RAT E-UTRAN layers of higher or lower priority at least every 1 hour.

When Srxlev > SnonIntraSearchP and Squal > SnonIntraSearchQ, the UE shall search for inter-RAT E-UTRAN of higher priority at least every K2\*Thigher\_priority\_search where Thigher\_priority\_search is described in clause 4.2.2.7 and K2=60.

In this case the UE is not required to meet Tdetect,EUTRAN , Tmeasure,EUTRAN and Tevaluate,EUTRAN as defined in Table 4.2.2.5-1.

------------------------------------------------------------- End of change 2 ------------------------------------------------------------