**3GPP TSG-RAN4 Meeting #98-bis-e *R4-21XXXX***

**Electronic meeting, Apr. 12 – Apr. 20, 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.133** | **CR** | **draft** | **rev** | **1** | **Current version:** | **16.7.0** |  |
|  | | | | | | | | |
| *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:*** | Draft CR on performance requirement for CSI-RSRP L3 measurement | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CATT | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_CSIRS\_L3meas-Perf | | | | |  | ***Date:*** | | | 2021-03-12 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***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 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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | 1. The report mapping of CSI-RSRP was not reflected in the specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Update the RSRP report mapping table in 10.1.6 to capture the CSI-RSRP measurement report mapping. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | 1. The report mapping for CSI-RSRP L3 measurement is missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.1.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This draft CR is based on the endorsed draft big CR R4-2101291. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

## <Start of Change 1>

### 10.1.6 RSRP Measurement Report Mapping

The reporting range of SS-RSRP and CSI-RSRP for L3 reporting is defined from -156 dBm to -31 dBm with 1 dB resolution. The reporting range of SS-RSRP and CSI-RSRP for L1 reporting is defined from -140 to -44 dBm with 1 dB resolution.

The mapping of measured quantity is defined in Table 10.1.6.1-1. The range in the signalling may be larger than the guaranteed accuracy range.

The reporting range of differential SS-RSRP and CSI-RSRP for L1 reporting and L3 reporting is defined from 0 dB to -30 dB with 2 dB resolution.

The mapping of measured quantity is defined in Table 10.1.6.1-2. The range in the signalling may be larger than the guaranteed accuracy range.

Table 10.1.6.1-1: SS-RSRP and CSI-RSRP measurement report mapping

|  |  |  |  |
| --- | --- | --- | --- |
| Reported value | Measured quantity value (L3 SS-RSRP and CSI-RSRP) | Measured quantity value (L1 SS-RSRP and CSI-RSRP) | Unit |
| RSRP\_0 | RSRP<-156 | Not valid | dBm |
| RSRP\_1 | -156≤RSRP<-155 | Not valid | dBm |
| RSRP\_2 | -155≤RSRP<-154 | Not valid | dBm |
| RSRP\_3 | -154≤RSRP<-153 | Not valid | dBm |
| RSRP\_4 | -153≤RSRP<-152 | Not valid | dBm |
| RSRP\_5 | -152≤RSRP<-151 | Not valid | dBm |
| RSRP\_6 | -151≤RSRP<-150 | Not valid | dBm |
| RSRP\_7 | -150≤RSRP<-149 | Not valid | dBm |
| RSRP\_8 | -149≤RSRP<-148 | Not valid | dBm |
| RSRP\_9 | -148≤RSRP<-147 | Not valid | dBm |
| RSRP\_10 | -147≤RSRP<-146 | Not valid | dBm |
| RSRP\_11 | -146≤RSRP<-145 | Not valid | dBm |
| RSRP\_12 | -145≤RSRP<-144 | Not valid | dBm |
| RSRP\_13 | -144≤RSRP<-143 | Not valid | dBm |
| RSRP\_14 | -143≤RSRP<-142 | Not valid | dBm |
| RSRP\_15 | -142≤RSRP<-141 | Not valid | dBm |
| RSRP\_16 | -141≤RSRP<-140 | RSRP<-140 | dBm |
| RSRP\_17 | -140≤RSRP<-139 | -140≤RSRP<-139 | dBm |
| RSRP\_18 | -139≤RSRP<-138 | -139≤ RSRP<-138 | dBm |
| … | … |  | … |
| RSRP\_111 | -46≤RSRP<-45 | -46≤ RSRP<-45 | dBm |
| RSRP\_112 | -45≤RSRP<-44 | -45≤ RSRP<-44 | dBm |
| RSRP\_113 | -44≤RSRP<-43 | -44≤ RSRP | dBm |
| RSRP\_114 | -43≤RSRP<-42 | Not valid | dBm |
| RSRP\_115 | -42≤RSRP<-41 | Not valid | dBm |
| RSRP\_116 | -41≤RSRP<-40 | Not valid | dBm |
| RSRP\_117 | -40≤RSRP<-39 | Not valid | dBm |
| RSRP\_118 | -39≤RSRP<-38 | Not valid | dBm |
| RSRP\_119 | -38≤RSRP<-37 | Not valid | dBm |
| RSRP\_120 | -37≤RSRP<-36 | Not valid | dBm |
| RSRP\_121 | -36≤RSRP<-35 | Not valid | dBm |
| RSRP\_122 | -35≤RSRP<-34 | Not valid | dBm |
| RSRP\_123 | -34≤RSRP<-33 | Not valid | dBm |
| RSRP\_124 | -33≤RSRP<-32 | Not valid | dBm |
| RSRP\_125 | -32≤RSRP<-31 | Not valid | dBm |
| RSRP\_126 | -31≤RSRP | Not valid | dBm |
| RSRP\_127 (Note) | Infinity | Infinity | dBm |
| Note: The value of RSRP\_127 is applicable for RSRP threshold configured by the network as defined in TS 38.331 [2], but not for the purpose of measurement reporting. | | | |

Table 10.1.6.1-2: Differential SS-RSRP and CSI-RSRP measurement (for L1 reporting and L3 reporting) report mapping

|  |  |  |
| --- | --- | --- |
| Reported value | Measured quantity value (difference in measured RSRP from strongest RSRP) | Unit |
| DIFFRSRP\_0 | 0≥ΔRSRP>-2 | dB |
| DIFFRSRP\_1 | -2≥ΔRSRP>-4 | dB |
| DIFFRSRP\_2 | -4≥ΔRSRP>-6 | dB |
| DIFFRSRP\_3 | -6≥ΔRSRP>-8 | dB |
| DIFFRSRP\_4 | -8≥ΔRSRP>-10 | dB |
| DIFFRSRP\_5 | -10≥ΔRSRP>-12 | dB |
| DIFFRSRP\_6 | -12≥ΔRSRP>-14 | dB |
| DIFFRSRP\_7 | -14≥ΔRSRP>-16 | dB |
| DIFFRSRP\_8 | -16≥ΔRSRP>-18 | dB |
| DIFFRSRP\_9 | -18≥ΔRSRP>-20 | dB |
| DIFFRSRP\_10 | -20≥ΔRSRP>-22 | dB |
| DIFFRSRP\_11 | -22≥ΔRSRP>-24 | dB |
| DIFFRSRP\_12 | -24≥ΔRSRP>-26 | dB |
| DIFFRSRP\_13 | -26≥ΔRSRP>-28 | dB |
| DIFFRSRP\_14 | -28≥ΔRSRP>-30 | dB |
| DIFFRSRP\_15 | -30≥ΔRSRP | dB |

## <End of Change 1>