**3GPP TSG-RAN WG4 Meeting # 98-bis-e R4-210XXXX**

**Electronic Meeting 12th April– 20th April 2021**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.133** | **CR** | **DraftCR** | **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 |  | Radio Access Network | **X** | Core Network |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | gNB SRS-RSRP measurement accuracy | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_pos-Perf | | | | |  | ***Date:*** | | | 2021-04-02 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | gNB SRS-RSRP measurement accuracy requirements are missing | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | gNB SRS-RSRP measurement accuracy requirements are added | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | gNB Positioning would not be complete without measurement accuracy definintion | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 13.3.2.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 CR's revision history:*** | | This is a revision of previously endorsed draft CR R4-2104052 | | | | | | | | |

**----------------------START OF CHANGES----------------------------**

### 13.3.2 Measurement accuracy requirements

#### 13.3.2.1 Introduction

This clause defines accuracy requirements for SRS-RSRP measurement in FR1 and FR2. The requirements are applicable for gNB supporting SRS-RSRP measurement.

#### 13.3.2.2 Requirements

The accuracy requirements in Table 13.3.2.2-1, Table 13.3.2.2-2, Table 13.3.2.2-3 and Table 13.3.2.2-4 are valid under the following conditions:

* AWGN propagation conditions.

*Editor’s note: further conditions are FFS.*

*Editor’s note: The needed number of bandwidth ranges for which specific SRS-RSRP measurement accuracy apply for given Ês/Iot side condition is FFS*

*Editor’s note: The dependency of SRS-RSRP measurement accuracy on SRS CombSize and SRS SymbolSize is FFS and shall be captured in an updated version of following tables if needed.*

*Editor’s note: SRS bandwidth is TBD, multiple SRS bandwidth ranges with distinct accuracy value shall be defined.*

Table 13.3.2.2-1 gNB SRS-RSRP absolute accuracy requirements in FR1 type 1-C

|  |  |  |
| --- | --- | --- |
| Accuracy | Conditions | |
| SRS Ês/Iot | SRS bandwidth range |
|
| dB | dB | RB |
| TBD | Ês/Iot ≥ -13 | TBD |
| TBD | TBD |
| TBD | TBD |
| TBD | Ês/Iot ≥ +3 | TBD |
| TBD | TBD |
| TBD | TBD |

Table 13.3.2.2-2 gNB SRS-RSRP absolute accuracy requirements in FR1 type 1-H

|  |  |  |
| --- | --- | --- |
| Accuracy | Conditions | |
| SRS Ês/Iot | SRS bandwidth range |
|
| dB | dB | RB |
| TBD | Ês/Iot ≥ -13 | TBD |
| TBD | TBD |
| TBD | TBD |
| TBD | Ês/Iot ≥ +3 | TBD |
| TBD | TBD |
| TBD | TBD |

Table 13.3.2.2-3 gNB SRS-RSRP absolute accuracy requirements in FR1 type 1-O

|  |  |  |
| --- | --- | --- |
| Accuracy | Conditions | |
| SRS Ês/Iot | SRS bandwidth range |
|
| dB | dB | RB |
| TBD | Ês/Iot ≥ -13 | TBD |
| TBD | TBD |
| TBD | TBD |
| TBD | Ês/Iot ≥ +3 | TBD |
| TBD | TBD |
| TBD | TBD |

Table 13.3.2.2-4 gNB SRS-RSRP absolute accuracy requirements in FR2 type 2-O

|  |  |  |
| --- | --- | --- |
| Accuracy | Conditions | |
| SRS Ês/Iot | SRS bandwidth range |
|
| dB | dB | RB |
| TBD | Ês/Iot ≥ -13 | TBD |
| TBD | TBD |
| TBD | TBD |
| TBD | Ês/Iot ≥ +3 | TBD |
| TBD | TBD |
| TBD | TBD |

**----------------------END OF CHANGES----------------------------**