**3GPP TSG- RAN4 Meeting #** **116 *R4-2510574***

**Bengaluru, India, August 25th – 29th, 2025**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.133** | **CR** |  | **rev** | **-** | **Current version:** | **19.1.0** |  |
|  |
| *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 scheduling availability of UE during CSI-RS based L1-RSRP measurement |
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| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_Mob\_Ph4-Core |  | ***Date:*** | 2025-07-22 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-19 |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | To specify scheduling availability of UE during CSI-RS based L1-RSRP measurement on candidate cells |
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| ***Summary of change:*** | Specify scheduling availability of UE during CSI-RS based L1-RSRP measurement on candidate cells |
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| ***Consequences if not approved:*** | The requirements of CSI-RS based L1 measurement on candidate cells are not completed. |
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| ***Clauses affected:*** | 9.14a.7 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **x** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** | **x** |  |  Test specifications | TS38.533 |
| ***(show related CRs)*** |  | **x** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

<Start of Change 1>

### 9.14a.7 Scheduling availability of UE during CSI-RS based L1-RSRP measurement

Scheduling availability restrictions described in the following clauses apply when UE is performing CSI-based L1-RSRP measurement on neighbor cell(s) without measurement gap.

Unless explicitly stated, the CSI-RS resource to be measured for L1-RSRP measurement is transmitted from neigbor cell(s).

#### 9.14a.7.1 Scheduling availability of UE performing L1-RSRP measurement with a same subcarrier spacing as PDSCH/PDCCH on FR1

There are no scheduling restrictions due to L1-RSRP measurement performed on CSI-RS as RS for L1-RSRP measurement with the same SCS as PDSCH/PDCCH in FR1.

#### 9.14a.7.2 Scheduling availability of UE performing L1-RSRP measurement on FR2

The following scheduling restriction applies due to CSI-RS based L1-RSRP measurement.

- The UE is not expected to transmit PUCCH/PUSCH/SRS or receive PDCCH/PDSCH/CSI-RS for tracking/CSI-RS for CQI on the concerned OFDM symbols, where the concern OFDM symbols are

- the same OFDM symbols corresponding to the CSI-RS resources configured for L1-RSRP measurement.

When intra-band carrier aggregation in FR2 is performed, the scheduling restrictions is performed apply to cell(s) in the band on the symbols that fully or partially overlap with restricted symbols.

When inter-band carrier aggregation in FR2 is performed, there are no scheduling restrictions on FR2 cells in the bands due to L1-RSRP measurement performed on FR2 cell(s) in different band(s), provided that UE is capable of independent beam management on this FR2 band pair. Additionally, there is no scheduling restriction if the UE is configured with different numerology between CSI-RS resources on one FR2 band and data on the other FR2 band provided the UE is configured for IBM operation for the band pair.

#### 9.14a.7.3 Scheduling availability of UE performing L1-RSRP measurement on FR1 or FR2 in case of FR1-FR2 inter-band CA

There are no scheduling restrictions on FR1 cell(s) due to CSI-RS based L1-RSRP measurement performed on FR2 cell(s).

There are no scheduling restrictions on FR2 cell(s) due to CSI-RS based L1-RSRP measurement performed on FR1 cell(s).

#### 9.14a.7.4 Scheduling availability of UE performing L1-RSRP measurement in TDD bands on FR1

When UE performs CSI-RS based L1-RSRP measurement on neighbor cell in a TDD band, the following restrictions apply due to L1-RSRP measurement

- The UE is not expected to transmit PUCCH/PUSCH/SRS on the concerned OFDM symbols and restricted symbols may partially or fully overlap with UL symbols, where the concern OFDM symbols are the same OFDM symbols corresponding to the CSI-RS resources configured for L1-RSRP measurement.

When TDD intra-band carrier aggregation is performed, the scheduling restrictions due to a given serving cell also apply to all other serving cells in the same band on the symbols that fully or partially overlap with the aforementioned restricted symbols.

<End of Change 1>