**3GPP TSG-RAN WG1 Meeting #110 *R1-2208017***

**Toulouse, France, August 22 – 26, 2022**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **TS 38.214** | **CR** | 301 | **rev** | **-** | **Current version:** | **17.2.0** |  |
|  |
| *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 | **X** | Core Network |  |

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| ***Title:***  | CR on priority states within the PRS processing window |
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| ***Source to WG:*** | Moderator (Huawei), Ericsson, HiSilicon |
| ***Source to TSG:*** | RAN1 |
|  |  |
| ***Work item code:*** | NR\_pos\_enh-Core |  | ***Date:*** | 2022-08-25 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***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 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)Rel-19 (Release 19)* |
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| ***Reason for change:*** | The specification does not capture the values of the priority of between PDCCH/PDSCH/CSI-RS and PRS. |
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| ***Summary of change:*** | For DL PRS measurement within DL PRS processing window, different priority states were agreed in RAN1#107-e. However, even though a higher layer parameter is introduced in 38.331 for a priority indicator, the definition of the different values of this priority indicator are not defined in 38.214. These defnitions are neither defined in 38.331.Hence, a correction is proposed in the draft CR to capture the definition of these different priority state values as agreed in RAN1#107-e. |
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| ***Consequences if not approved:*** | Specification incomplete. |
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| ***Clauses affected:*** | 5.1.6.5 |
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|  | **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 ...  |
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| ***Other comments:*** | **Isolated Impact Analysis:**No inter-operability issue is identified. |
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| ***This CR's revision history:*** |  |

5.1.6.5 PRS reception procedure

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Unchanged Text Omitted \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

The UE is expected to measure the DL PRS outside the measurement gap, subject to UE capability, if the DL PRS is inside the active DL BWP and has the same numerology as the active DL BWP and is within the DL PRS processing window indicated by higher layer parameter [*PRSProcessingWindow*]. The UE is not expected to measure the DL PRS outside the measurement gap if the expected received timing difference between the DL PRS from the non-serving cell and that from the serving cell, determined by the higher layer parameters *nr-DL-PRS-ExpectedRSTD* and *nr-DL-PRS-ExpectedRSTD-Uncertainty,* is larger than maximum Rx timing difference provided by [UE capability]*.* For receiving the DL PRS outside the measurement gap and within the DL PRS processing window, the UE determines the DL PRS priority as indicated by higher layer parameter [*PRS-priority-indicator*] subject to UE capability or as implied by UE capability:

- with value *‘st1’* where the DL PRS is higher priority than all the DL signal/channels except SSB, or

- with value *‘st2’* where the DL PRS is lower priority than PDCCH and the PDSCH scheduled by DCI formats 1\_1 or 1\_2 with the priority indicator field in the corresponding DCI format set to 1, and is higher priority than other DL signals/channels except SSB, or

- with value *‘st3’* where the DL PRS is lower priority than all the DL signals/channels except SSB.

Inside one instance of the [*PRSProcessingWindow*] the UE is only expected to measure a single DL PRS positioning frequency layer.

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