**3GPP TSG-RAN WG1 Meeting #110 *R1-2208018***

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

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **TS 38.214** | **CR** | 302 | **rev** | **-** | **Current version:** | **17.2.0** |  |
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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:*** | CR on PRS processing sample for 38.214 | | | | | | | | | |
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| ***Source to WG:*** | Moderator (Huawei), ZTE | | | | | | | | | |
| ***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 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) Rel-19 (Release 19)* | |
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| ***Reason for change:*** | | In RAN1#106e and RAN1#106bis meeting, the following agreements were achieved for postioning latency improvement, where at least =1 is supported for PRS processing sample. Moreover, in RAN4#102 meeting, can also be equal to 2 for DL RSTD, DL PRS-RSRP, or UE Rx-Tx time difference measurements under certain conditions.  However, in the current TS 38.214, only =1 or =4 is specified. In other words, =2 is not supported in the current TS 38.214 for PRS processing sample. It is not aligned with the agreements, TS 38.133 and the corresponding UE capabilities.  Agreement in RAN1#106-e:  Subject to UE capability, support LMF to explicitly request UE to report the measurement with either M-sample or 4-sample, if RAN4 has supported M-sample measurement.   * FFS signalling details.   Agreement in RAN1#106bis-e:  For the PRS processing sample number M, at least M = 1 is supported.  Agreement in RAN4#102-e:   * Define low latency requirements the reduced number of samples:   + = 1 if the condition under which AGC is not required is met   + = 2 if the condition under which AGC is not required is NOT met | | | | | | | | |
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| ***Summary of change:*** | | Define the reduced number of samples as = 1 or 2 | | | | | | | | |
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| ***Consequences if not approved:*** | | The specification is not aligned with RAN4’s agreement and the corresponding UE capabilities. | | | | | | | | |
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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:**  This is to correct the specification to align the previous agreement. No isolated impact is expected. | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

5.1.6.5 PRS reception procedure

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

The UE may be requested, subject to UE capability, to measure and report one or more of the DL RSTD, DL PRS-RSRP, or UE Rx-Tx time difference measurements with either or 4 samples, where = 1 or 2 is as defined in [11, TS 38.133], via higher layer parameter *requestedDL-PRS-ProcessingSamples* [17, TS 37.355] which applies for all DL PRS positioning frequency layers.

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