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

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

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **TS 38.214** | **CR** | 302 | **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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | CR on PRS processing sample for 38.214 |
|  |  |
| ***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 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)* |
|  |  |
| ***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
 |
|  |  |
| ***Summary of change:*** | Define the reduced number of samples as = 1 or 2 |
|  |  |
| ***Consequences if not approved:*** | The specification is not aligned with RAN4’s agreement and the corresponding UE capabilities. |
|  |  |
| ***Clauses affected:*** | 5.1.6.5 |
|  |  |
|  | **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:*** | **Isolated Impact Analysis:**This is to correct the specification to align the previous agreement. No isolated impact is expected. |
|  |  |
| ***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.

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