**3GPP TSG-RAN WG4 Meeting #94-e *R4-2002210***

**Electronic Meeting, February 24 – March 6, 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.133** | **CR** | **0579** | **rev** | **1** | **Current version:** | **15.8.0** |  |
|  | | | | | | | | |
| *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 38.133 (8.11) Corrections to PSCell change delay requirements | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-core | | | | |  | ***Date:*** | | | 2020-03-04 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-15 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The PSCell change delay requirement is currently making references to PSCell addition for the interruption time between leaving source PSCell and entering taget PSCell. However, the PSCell addition is allowing a Tprocessing = 40ms software processing and RF warm-up period, out of which 20ms comprises loading of software. When changing PSCell between cells in the same FR there is no need for excessive reloading of software, as evident from the NR handover requirements. The PSCell change delay requirement should be modified to reflect this. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Introducing the following correction:   * Replacing reference to PSCell addition delay requirement by applicable parts of the referred specification text * Specifying that Tprocessing = 20ms for PSCell change between cells in the same FR * Specifying that Tprocessing = 40ms for PSCell change between cells in different FRs | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Requirement remains too relaxed in assuming that SW re-loading would be needed. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.11 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS/TR ... CR ... 38.533 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev 1: Specification text has been updated to specify that Tprocessing is 40ms when source and target PSCells are in different FRs. Captures agreement from first round (see R4-2002165 for background). | | | | | | | | |

Unchanged Sections Omitted

First Modification

8.11 PSCell Change

This clause defines requirements for the delay within which the UE shall be able to change PSCell to other SCell in EN-DC or NR-DC. The requirements in this clause are applicable to EN-DC and NR-DC.

Upon receiving PSCell change in subframe *n*, the UE shall be capable of transmitting PRACH preamble towards the target PSCell no later than specified in clause 8.9.2, where the following value for Tprocessing shall override the existing:

* Tprocessing = 20 ms, when source and target cells are in the same FR,
* Tprocessing = 40 ms, when source and target cells are in different FRs.

The target PSCell is known if it has been meeting the conditions in clause 8.9.2.

The PCell interruption specified in clause 8.2 is allowed only during the RRC reconfiguration procedure [2].

End of First Modification

Unchanged Sections Omitted