**3GPP TSG-RAN WG4 Meeting #105R4-2218290**

**Toulouse, France, November 14 – November 18, 2022**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.307** | **CR** | **0111** | **rev** |  | **Current version:** | **17.7.0** |  |
|  |
| *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:***  | CR on release independent for Rel-17 FR1 HST RRM |
|  |  |
| ***Source to WG:*** | CMCC |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_HST\_FR1\_enh-Perf |  | ***Date:*** | 2022-11-04 |
|  |  |  |  |  |
| ***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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | The draft CR on release independent for Rel-17 FR1 HST RRM was agreed in RAN4 #102-bis-e meeting (R4-2208513). However, some how it was not captured in TS 38.307 |
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| ***Summary of change:*** | Rel.17 NR FR1 HST RRM requirements are supported from Rel-16 in a release independent manner. |
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| ***Consequences if not approved:*** | Rel.17 NR FR1 HST RRM requirements are not supported from Rel-16. |
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| ***Clauses affected:*** | 5.4, Annex C |
|  |  |
|  | **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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

## << Start of 1st change >>

## 5.4 Other release independent features for NR frequency range 1

This clause covers requirements for a Rel-15 UE coming from all other release independent features that are not covered under clause 5.1, 5.2 and 5.3, e.g. generic baseband requirements or requirements that are not band/CA/SUL configuration specific.

Table 5.4-1: Additional requirements of other release independent features

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| --- | --- | --- | --- |
| Feature | Releaseindependent from | Requirements to be fulfilled(see 38.307 of the REL when the feature was introduced) | Further information |
| RRM requirements for high speed train scenario | Rel-15 (NOTE 1) | Table C.1-1 | Rel-16 WI NR\_HST introduced band independent RRM requirements: see Table C.1-1 |
| UE demodulation requirements for high speed train scenario | Rel-15 (NOTE 1) | Table C.2-1 | Rel-16 WI NR\_HST introduced band independent UE demodulation requirements: see Table C.2-1 |
| RF requirements for 4Rx UEs | Rel-15 | Table B.4.10-1, Table B.4.10-2 |  |
| [Transparent Tx diversity] | [Rel-15] | [Table B.4.11-1] | [Rel-17 WI NR\_RF\_TxD introduced transparent Tx diversity requirements: see Table B.4.11-1] |
| UE demodulation and CSI requirements for MMSE-IRC receiver for scenarios with inter cell and intra cell inter user interference | Rel-15 | Table B.3.3-1 | Rel-17 WI NR\_demod\_enh2-Perf: see Table B.3.3-1. These requirements are optional for Rel-15 and Rel-16 UEs and can be executed based on UE declaration. |
| RRM enhancement for FR1 high speed train scenario enhancement | Rel-16 (NOTE 2) | Table C.3-1 | Rel-17 WI NR\_HST\_FR1\_enh introduced band independent RRM enhancement: see Table C.3-1 |
| NOTE 1: Rel-15 UEs supporting the high speed train are assumed to read the Rel-16 high speed train scenario information, which is broadcast to all UEs.NOTE 2: Rel-16 UEs supporting the high speed train are assumed to read the Rel-17 high speed train scenario information, which is broadcast to all UEs. |

<< End of 1st change >>

## << Start of 2nd change >>

## C.3 Common RRM requirements for FR1 high speed train scenario enhancement

The requirements and test cases listed in Table C.3-1 are specified in TS 38.133 Rel-17.

Table C.3-1: RRM requirements for FR1 high speed train scenario enhancement

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| --- | --- |
| Clause | Description |
| 4.2.2.4 in TS 38.133 | Cell Re-selection requirements for inter-frequency NR cells for FR1 high speed train scenario  |
| 9.2.5 in TS 38.133 | NR intra-frequency measurements without measurement gaps for activated SCell and deactivated SCell for FR1 high speed train scenario |
| 9.2.6 in TS 38.133 | NR intra-frequency measurements with measurement gaps for active SCell for FR1 high speed train scenario |
| 9.3.4 in TS 38.133 | Inter-frequency measurement with measurement gaps for FR1 high speed train scenario  |
| 9.3.5 in TS 38.133 | Inter-frequency measurement with measurement gaps for FR1 high speed train scenario |
| 9.3.9 in TS 38.133 | Inter frequency measurements without measurement gaps for FR1 high speed train scenario |
| 9.5.4 in TS 38.133 | L1-RSRP measurement requirements for FR1 high speed train scenario |

<< End of 2nd change >>