3GPP TSG-RAN WG4 Meeting # 100-e Draft R4-2115665

Electronic Meeting, August. 16-27, 2021

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.113** | **CR** |  | **rev** |  | **Current version:** | **15.14.0** |  |
|  |
| *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 |  | Radio Access Network | **X** | Core Network |  |

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|  |
| ***Title:***  | CR to TS 38.113 on Spatial Exclusion description, Release 15 |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_newRAT-Core |  | ***Date:*** | 2021-08-16 |
|  |  |  |  |  |
| ***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 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)* |
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| ***Reason for change:*** | Clarification in the definition of spatial exclusion. |
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| ***Summary of change:*** | This Cat. F updates the definition of spatial exclusion for Release 15. |
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| ***Consequences if not approved:*** | Lack of clarity in the definition of spatial exclusion migh lead to wrong testing procedures.  |
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| ***Clauses affected:*** |  9.2.2 |
|  |  |
|  | **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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

------------------------------ Start of new section ------------------------------

### 9.2.2 Test method and level

The test method shall be in accordance with IEC 61000‑4‑3 [18], which specified test methodology based on anechoic chamber. The use of reverberation chamber test method according to IEC 61000-4-21 [29], clause 6.1 and Annex D as alternative method is allowed.

For transmitters, receivers and transceivers the following requirements shall apply:

- The test level shall be 3 V/m amplitude modulated to a depth of 80 % by a sinusoidal audio signal of 1 kHz;

- The stepped frequency increments shall be 1 % of the momentary frequency;

- The test shall be performed over the frequency range 80 MHz - 6000 MHz; with the exception of the exclusion band for receivers (see clause 4.4);

- Responses in stand-alone receivers or receivers which are part of transceivers occurring at discrete frequencies which are narrow band responses, shall be disregarded, see clause 4.3;

- The frequencies selected during the test shall be recorded in the test report.

- For the test method in accordance with IEC 61000-4-3[18], the *spatial exclusion zone* can be chosen to protect the base station receiver. For the frequency arrange above 690 MHz (according to the test method in ETSI EN 301 489-50 [28]), the EMC RF electromagnetic field immunity requirement applies on the non-radiating faces of the *BS type 1-O* or *BS type 2-O,* as depicted on figure 9.2.2-1.

NOTE: Depending on the BS implementation, application of the spatial exclusion to all radiating faces of the BS may not allow proper execution of the RI testing. In such cases, to protect the *BS type 1-O* or *BS type 2-O* receiver(s), exclusion bands shall be considered, as in table 4.4.2-1.



Figure 9.2.2-1: EMC RF electromagnetic field immunity requirement testing directions for *BS type 1-O* and *BS type 2-O* (horizontal plane depicted) with the *spatial exclusion zone* applied

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