**3GPP TSG-SA4 Meeting # 120-e**  ***S4-221186***

**Online, 17 Aug 2022 - 26 Aug 2022revision of S4-220979**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.131** | **CR** | **0084** | **rev** | **0** | **Current version:** | **17.1.1** |  |
|  | | | | | | | | |
| *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:*** | Missing definition of performance requirements for receive frequency response (electrical interface UE) | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | HEAD acoustics GmbH | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | HInT, TEI17 | | | | |  | ***Date:*** | | | 2022-08-26 |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In clause 7.4.8 (receive frequency response for electrical interface UE), some text, a table and a figure that define and describe performance requirements are missing. They were not taken over from the CR that was approved in SP-211350. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add text, table and figure as in SP-211350 that complete the description of performance requirements in clause 7.4.8. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | No performance requirements is defined in clause 7.4.8, which would remain incomplete and ambigious. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.4.8 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

7.4.8 Electrical interface UE receiving

The sensitivity/frequency characteristics shall be as follows:

The receiving sensitivity frequency response measured at the electrical reference point shall be within a mask, which can be drawn with straight lines between the breaking points in table 30a2 on a logarithmic (frequency) - linear (dB sensitivity) scale.

**Table 30a2: Handset receiving sensitivity/frequency requirement mask**

|  |  |  |
| --- | --- | --- |
| **Frequency (Hz)** | **Upper limit** | **Lower limit** |
| 100 | 2 | -10 |
| 200 | 2 | -7 |
| 1000 | 2 | -2 |
| 3000 | 2 | –2 |
| 5000 | 2 | –2 |
| 8000 | 2 | -3 |
| 12500 | 2 | -6 |
| 16000 | 2 |  |
| NOTE: All sensitivity values are expressed in dB on an arbitrary scale. | | |

Chart, line chart

Description automatically generated

**Figure 16b: Electrical interface sensitivity/frequency masks. The frequency response of the EVS codec operating as specified in TS 26.132 (super-wideband 24,4kbit/s, using the specified P.501 speech test signal), is plotted for reference, normalized to 0dB at 1kHz.**

A UE operating in super-wideband mode shall pass the super-wideband requirements (i.e. when measured according to in 1/3rd octaves) as specified in Table 30a2, and shall also pass the wideband sensitivity/frequency characteristics requirements in the wideband range using the wideband measurement (i.e. measured in 1/12th octaves) as specified in Table 14a2.

Compliance shall be checked by the relevant test described in TS 26.132.