**3GPP TSG- Meeting #**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  |
| *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:***  | (TEI18)CR for TS38.104 define FR2 home class as one of kind of LA BS |
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| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** |  |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | NR FR1 HBS was specified to be included LA class BS in Rel-17, but FR2 HBS has not been specified. On the other hand, some femto BS whose EIRP has 31-42 dBm already under development. Power is assumed to be for indoor deployment scenarios, with a cell radius of 30m to 50m. Thus, we need clarifiy which class should be defined for FR2 HBS in 3GPP. During RAN#102 plenary discussion, it’s the common understanding that HBS requirements consideration can be handled in RAN4 under TEI. The RF requirements for FR2 HBS are listed into this CR to make NR spec cover FR2 HBS. |
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| ***Summary of change:*** | Regard FR2 HBS as one kind of LA and clarify that all LA requirements are also applicable for such low power BS with following updates:* Add some note in 4.4 for BS class definition.
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| ***Consequences if not approved:*** | There is no FR2 home BS in current specification. |
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| ***Clauses affected:*** |  |
|  |  |
|  | **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:*** | This is the revision of R4-2409119 |

**--------------Start of text proposal-------------**

## 4.4 Base station classes

The requirements in this specification apply to Wide Area Base Stations, Medium Range Base Stations and Local Area Base Stations unless otherwise stated. The associated deployment scenarios for each class are exactly the same for BS with and without connectors.

For BS *type 1-O* and 2-O, BS classes are defined as indicated below:

- Wide Area Base Stations are characterised by requirements derived from Macro Cell scenarios with a BS to UE minimum distance along the ground equal to 35 m.

- Medium Range Base Stations are characterised by requirements derived from Micro Cell scenarios with a BS to UE minimum distance along the ground equal to 5 m.

- Local Area Base Stations are characterised by requirements derived from Pico Cell scenarios with a BS to UE minimum distance along the ground equal to 2 m.

NOTE: For BS *type 2-O*, Local Area Base stations are applicable also in Femto Cell scenarios.

For *BS type 1-C* and 1-H, BS classes are defined as indicated below:

- Wide Area Base Stations are characterised by requirements derived from Macro Cell scenarios with a BS to UE minimum coupling loss equal to 70 dB.

- Medium Range Base Stations are characterised by requirements derived from Micro Cell scenarios with a BS to UE minimum coupling loss equals to 53 dB.

- Local Area Base Stations are characterised by requirements derived from Pico Cell scenarios with a BS to UE minimum coupling loss equal to 45 dB.

NOTE: Local Area Base stations are applicable also in Femto Cell scenarios.

For BS *type 1-C, 1-H and 1-O,* HAPS BS class is defined as indicated below:

- HAPS Base Stations are characterised by requirements derived from High Altitude Platform scenarios with a BS to ground UE minimum distance of typically around 20km.

- Unless otherwise stated, HAPS BS class would refer to Wide Area BS class, which is specified in clause 4.4.

**--------------End of text proposal-------------**