**3GPP TSG-RAN WG4 Meeting # 104-eR4-2211924**

Electronic Meeting, August 15 – August 26, 2022

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-2** | **CR** | **480** | **rev** | - | **Current version:** | **17.6.0** |  |
|  | | | | | | | | |
| *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:*** | Modification on maiximum ouput power related terminology | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Apple | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17 | | | | |  | ***Date:*** | | | 2022-08-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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:*** | | The deinition of ΔTIB,P,n, ΔTIB,S,n,  ΔMBP,n and ΔMBS,n needs to be aligned with previous release. | | | | | | | | |
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| ***Summary of change:*** | | ΔTIB,P,n Allowed relaxation to peak EIRP requirements due to support for inter-band CA operation, per supported band in a combination.  ΔTIB,S,n Allowed relaxation to EIRP spherical coverage due to support for inter-band CA operation, per supported band in a combination.  ΔMBP,n Allowed relaxation to each, minimum peak EIRP and reference sensitivity due to support for multi-band operation, per supported band in a combination.  ΔMBS,n Allowed relaxation to each, EIRP spherical coverage and EIS spherical coverage due to support | | | | | | | | |
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| ***Consequences if not approved:*** | | The terminologies is misaligned between releases. | | | | | | | | |
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| ***Clauses affected:*** | | Subclause 3.2 | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **x** |  | Test specifications | | | | TS/TR 38.521-1 | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

## 3.2 Symbols

For the purposes of the present document, the following symbols apply:

∆EIRPBC The beam correspondence tolerance, where ∆EIRPBC = EIRP2 – EIRP1

ΔFGlobal Granularity of the global frequency raster

ΔFRaster Band dependent channel raster granularity

ΔfOOB Δ Frequency of Out Of Band emission

ΔRB The starting frequency offset between the allocated RB and the measured non-allocated RB

ΔRIB Allowed reference sensitivity relaxation due to support for inter-band CA operation

ΔRIB,P,n Allowed relaxation to reference sensitivity due to support for inter-band CA operation, per supported band in a combination.

ΔRIB,S,n Allowed relaxation to EIS spherical coverage due to support for inter-band CA operation, per supported band in a combination.

ΔTIB Allowed relaxation to EIRP requirements due to support for inter-band CA operation

ΔTIB,P,n Allowed relaxation to peak EIRP requirements due to support for inter-band CA operation, per supported band in a combination.

ΔTIB,S,n Allowed relaxation to EIRP spherical coverage due to support for inter-band CA operation, per supported band in a combination.

ΔMBP,n Allowed relaxation to each, minimum peak EIRP and reference sensitivity due to support for multi-band operation, per supported band in a combination.

ΔMBS,n Allowed relaxation to each, EIRP spherical coverage and EIS spherical coverage due to support for multi-band operation, per supported band in a combination.

BWChannel Channel bandwidth

BWChannel\_CA Aggregated channel bandwidth, expressed in MHz

BWGB max( BWGB,Channel(k) )

BWGB,Channel(k) Minimum guard band defined in sub-clause 5.3A.2 of carrier k

BWinterferer Bandwidth of the interferer

Ceil(x) Rounding upwards; ceil(x) is the smallest integer such that ceil(x) ≥ x

EIRP1 The measured total EIRP based on the beam the UE chooses autonomously (corresponding beam) to transmit in the direction of the incoming DL signal, which is based on beam correspondence without relying on UL beam sweeping

EIRP2 The measured total EIRP based on the beam yielding highest EIRP in a given direction, which is based on beam correspondence with relying on UL beam sweeping

EIRPmax The applicable maximum EIRP as specified in sub-clause 6.2.1

Floor(x) Rounding downwards; floor(x) is the greatest integer such that floor(x) ≤ x

F\_center The center frequency of an allocated block of PRBs

FC *RF reference frequency* for the carrier center on the channel raster, given in table 5.4.2.2-1

FC,block, high Fc of the highest transmitted/received carrier in a sub-block.

FC,block, low Fc of the lowest transmitted/received carrier in a sub-block.

FC, low The Fc of the lowest carrier, expressed in MHz.

FC, high The Fc of the highest carrier, expressed in MHz.

FDL\_low The lowest frequency of the downlink *operating band*

FDL\_high The highest frequency of the downlink *operating band*

Fedge,block,low The lower sub-block edge, where Fedge,block,low = FC,block,low - Foffset, low.

Fedge,block,high The upper sub-block edge, where Fedge,block,high = FC,block,high + Foffset, high.

Fedge, low The lower edge of *Aggregated Channel Bandwidth*, expressed in MHz. Fedge, low = FC, low - Foffset, low.

Fedge, high The upper edge of *Aggregated Channel Bandwidth*, expressed in MHz. Fedge, high = FC, high + Foffset, high.

FInterferer Frequency of the interferer

FInterferer (offset) Frequency offset of the interferer (between the center frequency of the interferer and the carrier frequency of the carrier measured)

FIoffset Frequency offset of the interferer (between the center frequency of the interferer and the closest edge of the carrier measured)

Floor(x) Rounding downwards; floor(x) is the greatest integer such that floor(x) ≤ x

FOOB The boundary between the NR out of band emission and spurious emission domains

FREF RF reference frequency

FREF-Offs Offset used for calculating FREF

FUL\_low The lowest frequency of the uplink *operating band*

FUL\_high The highest frequency of the uplink *operating band*

FUL\_Meas The sub-carrier frequency for which the equalizer coefficient is evaluated

GBChannel Minimum guard band defined in sub-clause 5.3.3

LCRB Transmission bandwidth which represents the length of a contiguous resource block allocation expressed in units of resources blocks

LCRB,Max Maximum number of RB for a given Channel bandwidth and sub-carrier spacing

Max() The largest of given numbers

Min() The smallest of given numbers

MPRf,c Maximum output power reduction for carrier *f* of serving cell *c*

MPRnarrow Maximum output power reduction due to narrow PRB allocation

MPRWT Maximum power reduction due to modulation orders, transmit bandwidth configurations, waveform types

*n*PRB Physical resource block number

NRACLR NR ACLR

NRB Transmission bandwidth configuration, expressed in units of resource blocks

NRB,low Transmission bandwidth configurations according to Table 5.3.2-1 for the lowest assigned component carrier in clause 5.3A.1

NRB,high Transmission bandwidth configurations according to Table 5.3.2-1 for the highest assigned component carrier in clause 5.3A.1

NREF NR Absolute Radio Frequency Channel Number (NR-ARFCN)

NREF-Offs Offset used for calculating NREF

PCMAX The configured maximum UE output power

PCMAX, *f*, *c* The configured maximum UE output power for carrier *f* of serving cell *c*

Pint The intermediate power point as defined in table 6.3.4.2-2

PInterferer Modulated mean power of the interferer

Pmax The maximum UE output power as specified in sub-clause 6.2.1

Pmin The minimum UE output power as specified in sub-clause 6.3.1

P-MPRf,c The Power Management UE Maximum Power Reduction for carrier *f* of serving cell *c*

PPowerClass Nominal UE power class (i.e., no tolerance) as specified in sub-clause 6.2.1

PRB The transmitted power per allocated RB, measured in dBm

PTMAX,f,c The measured total radiated power for carrier *f* of serving cell *c*

PUMAX The measured configured maximum UE output power

Pw Power of a wanted DL signal

RBstart Indicates the lowest RB index of transmitted resource blocks

SCSlow SCS for the lowest assigned component carrier in clause 5.3A.1

SCShigh SCS for the highest assigned component carrier in clause 5.3A.1

SSREF SS block reference frequency position

T(∆P) The tolerance T(∆P) for applicable values of ∆P (values in dB)

TRPmax The maximum TRP for the UE power class as specified in sub-clause 6.2.1