3GPP TSG-RAN WG3 Meeting #125bis R3-24xxxx

Hefei, China, 14th – 18th Oct 2024

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.473** | **CR** | **1513** | **rev** |  | **Current version:** | **17.10.0** |  |
|  |
| *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:***  | introduction of bandwidths 35MHz and 45MHz in FR1 SRS Bandwidth |
|  |  |
| ***Source to WG:*** | China Telecom, CATT, China Unicom, Ericsson, Huawei |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NR\_pos-Core,TEI17 |  | ***Date:*** | 2024-10-18 |
|  |  |  |  |  |
| ***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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | Per TS38.104, some FR1 bandwidth values specified in Rel-17 are not included in *Requested SRS Transmission Characteristics* IE. In order to support positioning function in different cell bandwith, it is need to include these missing banddith values in *Requested SRS Transmission Characteristics* IE. |
|  |  |
| ***Summary of change:*** | * To add the codepoints 35 and 45 in *FR1 bandwidth* in *Requested SRS Transmission Characteristics* IE and corresponding ASN.1 part.

Impact Analysis:Impact assessment towards the previous version of the specification (same release):This CR has an isolated impact towards the previous version of the specification (same release). This CR only has an impact on Positioning function. |
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| ***Consequences if not approved:*** | Cell Bandwidth Configurations, i.e, 35MHz, 45MHz, can not be supported in Positioning function. |
|  |  |
| ***Clauses affected:*** | 9.3.1.175,9.3.5 |
|  |  |
|  | **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:*** |  |

//////////////////////////////////////////////////////////////irrelevant operations skipped/////////////////////////////////////////////////////////////////////

#### 9.3.1.175 Requested SRS Transmission Characteristics

This IE contains the requested SRS configuration for the UE for positioning purposes.

| **IE/Group Name** | **Presence** | **Range** | **IE Type and Reference** | **Semantics Description** | **Criticality** | **Assigned Criticality** |
| --- | --- | --- | --- | --- | --- | --- |
| Number Of Periodic Transmissions | C-ifResourceTypePeriodic |  | INTEGER (0..500,…) | The number of periodic SRS transmissions requested. The value of ‘0’ represents an infinite number of SRS transmissions. | - |  |
| Resource Type | M |  | ENUMERATED (periodic, semi-persistent, aperiodic, …) |  | - |  |
| CHOICE *Bandwidth SRS* | M |  |  |  | - |  |
| *>FR1* |  |  |  |  |  |  |
| >>FR1 Bandwidth | M |  | ENUMERATED (5, 10, 20, 40, 50, 80, 100, ... ,35, 45) |  | - |  |
| >*FR2* |  |  |  |  |  |  |
| >>FR2 Bandwidth | M |  | ENUMERATED (50, 100, 200, 400,…,800,1600, 2000) |  | - |  |
| **SRS Resource Set List** |  | *0.. 1* |  |  | - |  |
| **>SRS Resource Set Item** |  | *1..<* *maxnoSRS-ResourceSets>* |  |  | - |  |
| >>Number of SRS Resources Per Set | O |  | INTEGER (1..16,...) | The number of SRS Resources per resource set for SRS transmission.  | - |  |
| **>>Periodicity List** |  | *0.. 1* |  |  | - |  |
| **>>>Periodicity List Item** |  | 1..<*maxnoSRS-ResourcePerSet*> |  |  | - |  |
| >>>>PeriodicitySRS | M |  | ENUMERATED (0.125, 0.25, 0.5, 0.625, 1, 1.25, 2, 2.5, 4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 160, 320, 640, 1280, 2560, 5120, 10240, …) | Milli-seconds | - |  |
| >>Spatial Relation Information | O |  | 9.3.1.181 | This IE is ignored if the *Spatial Relation Information per SRS Resource* IE is present. | - |  |
| >>Pathloss Reference Information | O |  | 9.3.1.201 |  | - |  |
| >>Spatial Relation Information per SRS Resource | O |  | 9.3.1.210 |  | YES | ignore |
| SSB Information | O |  | 9.3.1.202 |  | - |  |
| SRS Frequency | O |  | INTEGER(0..3279165) | NR ARFCN The carrier frequency of SRS transmission bandwidth. | YES | ignore |

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### 9.3.5 Information Element definitions

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-- F

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FR1-Bandwidth ::= ENUMERATED {bw5, bw10, bw20, bw40, bw50, bw80, bw100, ..., bw35, bw45}

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