**3GPP TSG-RAN WG1 Meeting #104-e *R1-210xxxx***

**E-meeting, January 25 – February 5, 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.211** | **CR** | **<CR#>** | **rev** | **-** | **Current version:** | **16.4.0** |  |
|  | | | | | | | | |
| *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 | **X** | Core Network |  |

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| ***Title:*** | Correction on usage of subCarrierSpacingCommon for unlicensed | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Moderator (Qualcomm), Samsung | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_unlic-Core | | | | |  | ***Date:*** | | | 2021-02-01 |
|  |  | | | |  | |  | | |  |
| ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In shared spectrum channel access, the bit for subCarrierSpacingCommon in PBCH is repurposed to indicate , as described in 38.213. However, in current 38.211, the parameter subCarrierSpacingCommon is still referenced. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | For shared spectrum channel access, avoid referencing subCarrierSpacingCommon | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Confusion from undefined subCarrierSpacingCommon | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.4.4.2, 7.4.3.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | **Impact Analysis:** | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

4.4.4.2 Point A

Point A serves as a common reference point for resource block grids and is obtained from:

- *offsetToPointA* for a PCell downlink where *offsetToPointA* represents the frequency offset between point A and the lowest subcarrier of the lowest resource block, which overlaps with the SS/PBCH block used by the UE for initial cell selection, expressed in units of resource blocks assuming 15 kHz subcarrier spacing for FR1 and 60 kHz subcarrier spacing for FR2;

- for operation without shared spectrum channel access, the lowest resource block has the subcarrier spacing provided by the higher layer parameter *subCarrierSpacingCommon*;

- for operation with shared spectrum channel access, the lowest resource block has the subcarrier spacing same as the SS/PBCH block used by the UE for initial cell selection;

- *absoluteFrequencyPointA* for all other cases where *absoluteFrequencyPointA* represents the frequency-location of point A expressed as in ARFCN.

7.4.3.1 Time-frequency structure of an SS/PBCH block

============================== Unchanged Text Omitted ==================================

For an SS/PBCH block, the UE shall assume

- antenna port  is used for transmission of PSS, SSS, PBCH and DM-RS for PBCH,

- the same cyclic prefix length and subcarrier spacing for the PSS, SSS, PBCH and DM-RS for PBCH,

- for SS/PBCH block type A,  and  with the quantities , and expressed in terms of 15 kHz subcarrier spacing, and

- for SS/PBCH block type B,  and  with the quantity  expressed in terms of the subcarrier spacing provided by the higher-layer parameter *subCarrierSpacingCommon* and expressed in terms of 60 kHz subcarrier spacing;

- the centre of subcarrier 0 of resource block coincides with the centre of subcarrier 0 of a common resource block with the subcarrier spacing provided by the higher-layer parameter *subCarrierSpacingCommon* for operation without shared spectrum channel access and same as the subcarrier spacing of the SS/PBCH block for operation with shared spectrum channel access. This common resource block overlaps with subcarrier 0 of the first resource block of the SS/PBCH block.