**3GPP TSG-RAN WG1 Meeting #118 *R1-24NNNN***

Maastricht, Netherlands, August 19th – August 24th, 2024

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| *CR-Form-v12.3* | | | | | | | | |
| **DRAFT CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | 38.211 | **CR** | xxxx | **rev** | - | **Current version:** | 18.3.0 |  |
|  | | | | | | | | |
| *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:*** | Draft CR for correction to SRS for positioning with tx hopping in 38.211 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Moderator (Ericsson), Ericsson | | | | | | | | | |
| ***Source to TSG:*** | RAN1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_pos\_enh2-Core | | | | |  | ***Date:*** | | | 2024-08-09 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | For SRS with Tx hopping, the starting position is separately configured for heach hop. The current specification mentions starting position configured under *resourceMapping*, which only pplies to the first hop. The parent IE for the remaining hop is not mentioned. | | | | | | | | |
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| ***Summary of change:*** | | Clarify the parent IE for startposition for the remaining hop in SRS tx hopping. | | | | | | | | |
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| ***Consequences if not approved:*** | | The parent IE for the remaining hop starting position is not clear. | | | | | | | | |
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| ***Clauses affected:*** | | 6.4.1.4.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

##### 6.4.1.4.1 SRS resource

An SRS resource is configured by the *SRS-Resource* IE or the *SRS-PosResource* IE and consists of

- antenna ports , where the number of antenna ports is given by the higher layer parameter *nrofSRS-Ports* or *nrofSRS-Ports-n8* if configured, otherwise , and when the SRS resource is in a SRS resource set with higher-layer parameter *usage* in *SRS-ResourceSet* not set to 'nonCodebook', or determined according to [6, TS 38.214] when the SRS resource is in a SRS resource set with higher-layer parameter *usage* in *SRS-ResourceSet* set to 'nonCodebook'.

- , the number of hops for SRS Tx hopping for an SRS resource configured by *SRS-PosResource* given by the higher layer parameter *numberOfHops* if configured, otherwise .

- consecutive OFDM symbols given by the field *nrofSymbols* contained in the higher layer parameter *resourceMapping*. If ,is the number of consecutive OFDM symbol per hop.

- , the starting position in the time domain given by  where the offset counts symbols backwards from the end of the slot and is given by the field *startPosition* contained in the higher layer parameter *resourceMapping* and . If is the starting position of each hop in the time domain, determined by the field *startPosition* contained in the higher layer parameter *resourceMapping* for the first hop and contained in the higher layer parameter *SlotOffsetForRemainingHops* for each remaining SRS transmission hop.

- , the frequency-domain starting position of the sounding reference signal.