**3GPP TSG-RAN WG2 Meeting #118 electronic R2-220xxxx**

**E-Meeting, 9th – 20th May, 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **16.8.0** |  |
|  | | | | | | | | |
| *For* [***HELP***](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:*** | Support of separate configuration of single CSI subframe set and multiple CSI subframe | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LTE\_euCA-Core | | | | |  | ***Date:*** | | | 2022-05-16 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***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:*** | | In TS 36.213, if a UE is configured to report for more than one CSI subframe set then parameter sets for subframe set 1 and subframe set 2 should be configured.  However, RRC signalling does not support to separate configuration of single CSI subframe set and multiple CSI subframe sets regarding cqi-pmi-ConfigIndexDormant/ cqi-pmi-ConfigIndex2Dormant and ri-ConfigIndexDormant /ri-ConfigIndex2Dormant.  In order to support the separate configuration of single CSI subframe set and multiple CSI subframe sets, the new capability is required | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Introduce the new capability for separate configuration of single CSI subframe set and multiple CSI subframe.  * multiCSI-SubframeSetConfig in 4.3.4   **Impact analysis**  Impacted 5G architecture options:  SA, MR-DC  Impacted functionality:  Separate configuration of single CSI subframe set and multiple CSI subframe  Inter-operability:  There is no interoperability issue. | | | | | | | | |
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| ***Consequences if not approved:*** | | Separate configuration of single CSI subframe set and multiple CSI subframe is not supported. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.3.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

START OF CHANGE

### 4.3.4 Physical layer parameters

-- skipped –

#### 4.3.4.221 *addSRS-r16*

Presence of this field indicates the UE supports the additional SRS symbol(s) within the normal UL subframes in TDD as described in TS 36.213 [23].

##### 4.3.4.221.1 *addSRS-1T2R-r16*

Indicates whether the UE supports selecting one antenna among two antennas to transmit additional SRS symbol(s) for the corresponding band of the band combination as described in TS 36.213 [23]. This field can be included only if *addSRS-r16* is included.

##### 4.3.4.221.2 *addSRS-1T4R-r16*

Indicates whether the UE supports selecting one antenna among four antennas to transmit additional SRS symbol(s) for the corresponding band of the band combination as described in TS 36.213 [23]. This field can be included only if *addSRS-r16* is included.

##### 4.3.4.221.3 *addSRS-2T4R-2Pairs-r16*

Indicates whether the UE supports selecting one antenna pair between two antenna pairs to transmit additional SRS symbol(s) simultaneously for the corresponding band of the band combination as described in TS 36.213 [23]. This field can be included only if *addSRS-r16* is included.

##### 4.3.4.221.4 *addSRS-2T4R-3Pairs-r16*

Indicates whether the UE supports selecting one antenna pair among three antenna pairs to transmit additional SRS symbol(s) simultaneously for the corresponding band of the band combination as described in TS 36.213 [23]. This field can be included only if *addSRS-r16* is included.

##### 4.3.4.221.5 *addSRS-AntennaSwitching-r16*

Indicates the antenna switching capabilities for additional SRS symbol(s). This field can be included only if *addSRS-r16* is included.

If signalled in *addSRS,* value *useBasic* indicates the antenna switching capabilities for additional SRS symbol(s) for a band of band combination for which the capability is not signalled in *bandParameterList-v1610* is the same as indicated by *bandParameterList-v1380* and/or *bandParameterList-v1530* for the concerned band of band combination.

If signalled in *bandParameterList-v1610*, the field indicates the antenna switching capabilities for additional SRS symbol(s) for the concerned band of band combination.

##### 4.3.4.221.6 *addSRS-CarrierSwitching-r16*

Indicates the carrier switching capabilities for additional SRS symbol(s). This field can be included only if *addSRS-r16* and *srs-CapabilityPerBandPairList-r14* are included.

If signalled in *addSRS,* the field indicates whether carrier switching is supported for additional SRS symbol(s) for all band pairs of band combinations for which UE supports SRS carrier switching. If signalled in *addSRS*,the field in *bandParameterList-v1610* is not signalled.

If signalled in *bandParameterList-v1610,* the field indicates whether carrier switching is supported for additional SRS symbol(s) for the concerned band pair of band combination. If signalled in *bandParameterList-v1610*, the field in *addSRS* is not signalled.

##### 4.3.4.221.7 *addSRS-FrequencyHopping-r16*

Indicates the frequency hopping capabilities for additional SRS symbol(s). This field can be included only if *addSRS-r16* is included.

If signalled in *addSRS,* the field indicates whether frequency hopping is supported for additional SRS symbol(s) for all bands of band combinations for which the capability is not signalled in *bandParameterList-v1610*.

If signalled in *bandParameterList-v1610*, the field indicates whether frequency hopping is supported for additional SRS symbol(s) for the concerned band of band combination.

##### 4.3.4.221.8 *virtualCellID-AddSRS-r16*

Indicates whether the UE supports virtual cell ID for additional SRS symbol(s).

#### 4.3.4.xxx *multiCSI-SubframeSetConfg*

This field indicates whether the UE supports the separate configuration of multiple CSI subframe sets for Dormant SCell state.

END OF CHANGE