**3GPP TSG- Meeting #**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  |
| *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:***  | Corrections on resource pool index |
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| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | RAN2 introduced mode-1 dedicated discovery resource pool configuration for NR SL discovery transmission, i.e. sl-DiscTxPoolScheduling. However, the current DCI Format 3\_0 cannot schedule any resource in the pool(s) indicated by sl-DiscTxPoolScheduling, since the “Resource pool index” field in DCI format 3\_0 cannot refer to any pool configured by sl-DiscTxPoolScheduling. |
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| ***Summary of change:*** | Clarify that the resource pool index field in DCI format 3\_0 carries the index of a transmit resource pool provided by sl-DiscTxPoolScheduling or sl-TxPoolScheduling. The field size is determined by the total number of transmit resource pools provided by sl-DiscTxPoolScheduling and sl-TxPoolScheduling.Clarify that DCI size alignment is performed among all tx pools including the ones provided by sl-DiscTxPoolScheduling if configured, and those provided by sl-TxPoolScheduling if configured. |
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| ***Consequences if not approved:*** | gNB is not allowed to schedule a dedicated discovery resource pool for mode-1 UE. |
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| ***Clauses affected:*** | 7.3.1.4.1 |
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|  | **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:*** |  |

##### 7.3.1.4.1 Format 3\_0

DCI format 3\_0 is used for scheduling of NR PSCCH and NR PSSCH in one cell.

The following information is transmitted by means of the DCI format 3\_0 with CRC scrambled by SL-RNTI or SL-CS-RNTI:

- Resource pool index –$\left⌈log\_{2}I\right⌉$ bits, where *I* is the total number of resource pools for transmission configured by the higher layer parameter *sl-TxPoolScheduling*, if configured, and *sl-DiscTxPoolScheduling*, if configured.

- Time gap – 3 bits determined by higher layer parameter *sl-DCI-ToSL-Trans,* as defined in clause 8.1.2.1 of [6, TS 38.214]

- HARQ process number – 4 bits.

- New data indicator – 1 bit.

- Lowest index of the subchannel allocation to the initial transmission –$\left⌈log\_{2}(N\_{ subChannel}^{ SL})\right⌉$ bits as defined in clause 8.1.2.2 of [6, TS 38.214]

- SCI format 1-A fields according to clause 8.3.1.1:

- Frequency resource assignment.

- Time resource assignment.

- PSFCH-to-HARQ feedback timing indicator –$\left⌈log\_{2}N\_{fb\\_timing}\right⌉$ bits, where $N\_{fb\\_timing}$ is the number of entries in the higher layer parameter *sl-PSFCH-ToPUCCH,* as defined in clause 16.5 of [5, TS 38.213]

- PUCCH resource indicator – 3 bitsas defined in clause 16.5 of [5, TS 38.213].

- Configuration index – 0 bit if the UE is not configured to monitor DCI format 3\_0 with CRC scrambled by SL-CS-RNTI; otherwise 3 bitsas defined in clause 8.1.2 of [6, TS 38.214]. If the UE is configured to monitor DCI format 3\_0 with CRC scrambled by SL-CS-RNTI, this field is reserved for DCI format 3\_0 with CRC scrambled by SL-RNTI.

- Counter sidelink assignment index – 2 bits

- 2 bits as defined in clause 16.5.2 of [5, TS 38.213] if the UE is configured with *pdsch-HARQ-ACK-Codebook = dynamic*

- 2 bits as defined in clause 16.5.1 of [5, TS 38.213] if the UE is configured with *pdsch-HARQ-ACK-Codebook = semi-static*

- Padding bits, if required

If the total number of transmit resource pools provided in *sl-TxPoolScheduling*, if configured, and *sl-DiscTxPoolScheduling*, if configured, is larger than one, zeros shall be appended to the DCI format 3\_0 until the payload size is equal to the size of a DCI format 3\_0 given by a configuration of the transmit resource pool resulting in the largest number of information bits for DCI format 3\_0.

If the UE is configured to monitor DCI format 3\_1 and the number of information bits in DCI format 3\_0 is less than the payload of DCI format 3\_1, zeros shall be appended to DCI format 3\_0 until the payload size equals that of DCI format 3\_1.