**3GPP TSG- Meeting #**

**Fukuoka** **City, Fukuoka, , -**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  |
| *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 |  | Core Network |  |

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|  |
| ***Title:***  | draft CR on SDR Requirements for Enhanced Support of RedCap |
|  |  |
| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** | NR\_redcap\_enh\_demod |  | ***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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | Include eRedCap devices to SDR section |
|  |  |
| ***Summary of change:*** | Define number of PRBs for PDSCH transmission |
|  |  |
| ***Consequences if not approved:*** | eRedCap devices not included in SDR section |
|  |  |
| ***Clauses affected:*** | 5.5.1 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** | **X** |  |  Test specifications | TS 38.521-4 |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

----------------------------------------------------- Beginning of Change ------------------------------------------------------------

### 5.5.1 FR1 single carrier requirements

The requirements in this clause are applicable to the FR1 single carrier case.

The requirements and procedure defined in Clause 5.5A.1 apply using operating band instead of CA configuration, and bandwidth instead of bandwidth combination.

For RedCap and eRedCap, the requirements and procedure are defined in Clause 5.5A.1 except that the MIMO layers are configured to 2 for UE supporting 2 MIMO layers and 1 for UE supporting 1 MIMO layers for all operating band. Antenna configuration is 1x1 for UE supporting 1 layer and 2x2 for UE supporting 2 layers.

For eRedCap with reduced peak date rate and reduced baseband bandwidth in FR1, only 25 PRBs for 15kHz SCS and 12RBs for 30kHz SCS are allocated for PDSCH transmission.

For RedCap UE with HD-FDD mode, the additional test parameters are specified in Table 5.5.1-1.

Table 5.5.1-1: Additional test parameters for HD-FDD single carrier

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Unit** | **Value** |
| Duplex mode |  | HD-FDD |
| PDSCH configuration | Starting symbol (S)  |  | 1 |
| Length (L) |  | 13 |
| Number of HARQ Processes |  | 4 |
| Full DL slots (Note 1, Note 2) |  | For slots i, if mod(i, 5) = {0,1,2} |
| K1 value (Note 2) |  | 4 if mod(i, 5) = 03 if mod(i, 5) = 12 if mod(i, 5) = 2 |
| Note 1: PDSCH is scheduled only on full DL slots.Note 2: i is the slot index per frame; i = {1, 2, …, 19}. |

------------------------------------------------------------- End of change ------------------------------------------------------------