**3GPP TSG-RAN WG2 Meeting # 117-e *R2-220xxxx***

**Electronic Meeting, 21st February– 3rd March, 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.331** | **CR** | **2960** | **rev** | **1** | **Current version:** | **16.7.0** |  |
|  | | | | | | | | |
| *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 |  | Core Network |  |

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| ***Title:*** | Clarification on *HighSpeedConfig* for HST | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon, CMCC | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_HST-Core | | | | |  | ***Date:*** | | | 2022-02-21 |
|  |  | | | |  | |  | | |  |
| ***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 Rel-16, some enhancement on RRM measurement and demodulation processing was introduced for HST with an IE *highSpeedMeasFlag-r16* and *highSpeedDemodFlag-r16* signalled per serving cell basis in both *ServingCellConfigCommonSIB* and *ServingCellConfigCommon*. However the Rel-16 HST only considers single carrier scenario. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarify in the field description of *highSpeedMeasFlag* and *highSpeedDemodFlag* that this parameter only applies to SpCell.  **Impact analysis**  **Impacted 5G architecture options:**  NR SA, NR-DC, NE-DC, (NG)EN-DC  **Impacted functionality:**  HST  **Inter-operability:**  If the network implements the change but not the UE, there is no inter-operability issue.  If the UE implements the change but not the network, there is no inter-operability issue. | | | | | | | | |
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| ***Consequences if not approved:*** | | UE may apply *highSpeedMeasFlag* and *highSpeedDemodFlag* to SCell and PSCell, which should not be supported. | | | | | | | | |
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| ***Clauses affected:*** | | 6.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | 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:*** | |  | | | | | | | | |

### 6.3.2 Radio resource control information elements

– *HighSpeedConfig*

The IE *HighSpeedConfig* is used to configure parameters for high speed scenarios.

***HighSpeedConfig* information element**

-- ASN1START

-- TAG-HIGHSPEEDCONFIG-START

HighSpeedConfig-r16 ::= SEQUENCE {

highSpeedMeasFlag-r16 ENUMERATED {true} OPTIONAL, -- Need R

highSpeedDemodFlag-r16 ENUMERATED {true} OPTIONAL, -- Need R

...

}

-- TAG-HIGHSPEEDCONFIG-STOP

-- ASN1STOP

| ***HighSpeedConfig* field descriptions** |
| --- |
| ***highSpeedMeasFlag***  If the field is present and UE supports *measurementEnhancement-r16*, the UE shall apply the enhanced intra-NR and inter-RAT EUTRAN RRM requirements to support high speed up to 500 km/h as specified in TS 38.133 [14].  If the field is present and UE supports *intraNR-MeasurementEnhancement-r16*, the UE shall apply enhanced intra-NR RRM requirement to support high speed up to 500 km/h as specified in TS 38.133 [14].  If the field is present and UE supports *interRAT-MeasurementEnhancement-r16*, the UE shall apply enhanced inter-RAT EUTRAN RRM requirement to support high speed up to 500 km/h as specified in TS 38.133 [14].  This parameter only applies to SpCell. |
| ***highSpeedDemodFlag***  If the field is present, the UE shall apply the enhanced demodulation processing for HST-SFN joint transmission scheme with velocity up to 500km/h as specified in TS 38.101-4 [59]. This parameter only applies to SpCell. |