**3GPP TSG-RAN2 Meeting #128 *draft R2-2411231***

**Orlando, US, 18 - 22 Nov, 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **36.306** | **CR** | **1905** | **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:*** | [Max-RRC-SegUL] | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17 | | | | |  | ***Date:*** | | | 2024-11-xx |
|  |  | | | |  | |  | | |  |
| ***Category:*** | A |  | | | | | ***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)* | |
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| ***Reason for change:*** | | RAN2 agreed that the network can indicate the maximum number of UL segments allowed to be used by the UE for UL RRC segmentation of UE capability information reporting.  It is also agreed that this mechanism should be applied for both LTE and NR from Rel-17, and early implementable from Rel-16. | | | | | | | | |
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| ***Summary of change:*** | | The following procedure is introduced.   1. The UE indicates its support for the network-requested maximum number of UL segments, in *RRCConnectionSetupComplete* message and *UECapabilityInformation* message. 2. The network indicates the maximum number of UL segments the UE is allowed to use. 3. The UE generates *UECapabilityInformation* ensuring the total size of the message does not exceed the maximum allowed size according to the maximum number of UL segments the UE is allowed to use.   This CR introduces the UE capability parameter which is indicated in *RRCConnectionSetupComplete* and *UECapabilityInformation* above.  ***Implementation of this CR by a Release 16 UE will not cause compatibility issues.***  **Impact analysis**  Impacted 5G architecture options:  (NG)EN-DC, LTE  Impacted functionality:  UE capability enquiry and reporting procedure  Inter-operability:   * If the network is implemented according to the CR and the UE is not; there is no inter-operability problem. * If the UE is implemented according to the CR and the network is not; there is no inter-operability problem. | | | | | | | | |
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| ***Consequences if not approved:*** | | UL RRC segmentation for UECapabilityInformation message can be utilized only if the network supports the maximum number of UL segments as supported by the current standard. | | | | | | | | |
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| ***Clauses affected:*** | | 4.3.15.xx | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS/TR36.331 CR#5084 | | |
| ***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

### 4.3.15 Other parameters

*[Text omitted]*

#### 4.3.15.24 *ul-RRC-Segmentation-r16*

This parameter defines whether the UE supports uplink RRC segmentation of *UECapabilityInformation* according to the network indication *rrc-SegAllowed* as specified in TS 36.331 [5].

#### 4.3.15.xx *ul-RRC-MaxCapaSegments-r17*

This parameter defines whether the UE supports uplink RRC segmentation of *UECapabilityInformation* according to the network indication *rrc-MaxCapaSegAllowed* as specified in TS 36.331 [5].

End of Change