**You 3GPP TSG- Meeting #110-e *R2-200xxxx***

**Electronic meeting, 1st – 12th June 2020**

|  |
| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **draftCR** | **rev** |  | **Current version:** | **16.0.0** |  |
|  |
| *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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network |  | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | UE capabilities for Rel-16 Power Saving WI |
|  |  |
| ***Source to WG:*** | Intel Corporation |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 2020-05-21 |
|  |  |  |  |  |
| ***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 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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
|  |  |
| ***Reason for change:*** | New UE capabilities for RAN2 driven features specified in Rel-16 Power Saving (PWS) WI are added. |
|  |  |
| ***Summary of change:*** | The new UE capabilities for RAN2 driven features specified in Rel-16 PWS WI are:1. 1st TP includes *drx-Preference*, *maxBW-Preference*, *maxCC-Preference,* *maxMIMO-Preference*, and *releasePreference*.
2. 2nd TP includes measurement relaxation as an optional feature without UE radio access capability.
 |
|  |  |
| ***Consequences if not approved:*** | Features specified in Rel-16 PWS WI would not be completed. |
|  |  |
| ***Clauses affected:*** | 4.2.2, 5 |
|  |  |
|  | **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:*** |  |

|  |
| --- |
|  |

### 4.2.2 General parameters

| Definitions for parameters | Per | M | FDD-TDD DIFF | **FR1-FR2**DIFF |
| --- | --- | --- | --- | --- |
| ***accessStratumRelease***Indicates the access stratum release the UE supports as specified in TS 38.331 [9]. | UE | Yes | No | No |
| ***delayBudgetReporting***Indicates whether the UE supports delay budget reporting as specified in TS 38.331 [9]. | UE | No | No | No |
| ***dl-DedicatedMessageSegmentation-r16***Indicates whether the UE supports reception of segmented DL RRC messages. | UE | No | No | No |
| ***drx-Preference-r16***Indicates whether the UE supports providing its preference on DRX parameters for power saving in RRC\_CONNECTED, as specified in TS 38.331 [9]. | UE | No | No | No |
| ***inactiveState***Indicates whether the UE supports RRC\_INACTIVE as specified in TS 38.331 [9]. | UE | Yes | No | No |
| ***inDeviceCoexInd-r16***Indicates whether the UE supports IDC (In-Device Coexistence) assistance information as specified in TS 38.331 [9]. | UE | No | No | No |
| ***maxBW-Preference-r16***Indicate whether the UE supports providing its preference on the maximum aggregated bandwidth for power saving in RRC\_CONNECTED, as specified in TS 38.331 [9]. | UE | No | No | Yes |
| ***maxCC-Preference-r16***Indicate whether the UE supports providing its preference on the maximum number of secondary component carriers for power saving in RRC\_CONNECTED, as specified in TS 38.331 [9]. | UE | No | No | No |
| ***maxMIMO-LayerPreference-r16***Indicate whether the UE supports providing its preference on the maximum number of MIMO layers for power saving in RRC\_CONNECTED, as specified in TS 38.331 [9]. | UE | No | No | Yes |
| ***overheatingInd***Indicates whether the UE supports overheating assistance information. | UE | No | No | No |
| ***reducedCP-Latency***Indicates whether the UE supports reduced control plane latency as defined in TS 38.331 [9] | UE | No | No | No |
| ***release-Preference-r16***Indicates whether the UE supports providing its preference assistance information to transition out of RRC\_CONNECTED for power saving, as specified in TS 38.331 [9]. | UE | No | No | No |
| ***splitSRB-WithOneUL-Path***Indicates whether the UE supports UL transmission via MCG path and DL reception via either MCG path or SCG path, as specified for the split SRB in TS 37.340 [7]. The UE shall not set the FDD/TDD specific fields for this capability (i.e. it shall not include this field in *UE-MRDC-CapabilityAddXDD-Mode*). | UE | No | No | No |
| ***splitDRB-withUL-Both-MCG-SCG***Indicates whether the UE supports UL transmission via both MCG path and SCG path for the split DRB as specified in TS 37.340 [7]. The UE shall not set the FDD/TDD specific fields for this capability (i.e. it shall not include this field in *UE-MRDC-CapabilityAddXDD-Mode*). | UE | Yes | No | No |
| ***srb3***Indicates whether the UE supports direct SRB between the SN and the UE as specified in TS 37.340 [7]. The UE shall not set the FDD/TDD specific fields for this capability (i.e. it shall not include this field in *UE-MRDC-CapabilityAddXDD-Mode*). This field is not applied to NE-DC. | UE | Yes | No | No |
| ***v2x-EUTRA***Indicates whether the UE supports EUTRA V2X according to *UE-EUTRA-Capability* as defined in TS 36.331 [17], independent of the configured EN-DC band combination. This field is only applied to EN-DC. In UE-NR-Capability, this field is not used, and UE does not include the field. | UE | No | Yes | No |

|  |
| --- |
|  |

# 5 Optional features without UE radio access capability parameters

| Definitions for feature |
| --- |
| SU-MIMO Interference Mitigation advanced receiver- R-ML (reduced complexity ML) receivers with enhanced inter-stream interference suppression for SU-MIMO transmissions with rank 2 with 2 RX antennas- R-ML (reduced complexity ML) receivers with enhanced inter-stream interference suppression for SU-MIMO transmissions with rank 2, 3, and 4 with 4 RX antennasUE supporting the feature is required to meet the Enhanced Receiver Type requirements in TS 38.101-4 [18]. |
| Relaxed measurement |

|  |
| --- |
| **End Text Proposal Change** |