**3GPP TSG-RAN WG2 Meeting #110 electronic *R2-2005476***

**1 June – 12 June 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.306** | **CR** | **CRNum** | **rev** | **RevNum** | **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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | Introduction of NR eURLLC capabilities | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_L1enh\_URLLC | | | | |  | ***Date:*** | | | 2020-06-01 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | **RAN2#109e**   * In Rel-16 NR, allow the value of 0.5 ms for the PDCP discard timer in URLLC WI. * In Rel-16 NR, do not introduce additional values of bucket size duration in URLLC WI. * In Rel-16 NR, do not introduce additional values of logical channel priority in URLLC WI. * In Rel-16 NR, additional values of PDCP discard timer is optional with a separate UE capability signalling. * In Rel-16 NR, additional values of RLC T-StatusProhibit timer is optional with a separate UE capability signalling. * In Rel-16 NR, additional values of RLC T-PollRetransmit timer is optional with a separate UE capability signalling.   The above agreements should be captured into the TS 38.306. | | | | | | | | |
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| ***Summary of change:*** | | 1. In subclause 4.2.4, add UE capability parameter for short values of PDCP discard timers 2. In subclause 4.2.5, add UE capability parameters for short values of RLC T-PollRetransmit and T-StatusProhibit timers, respectively. | | | | | | | | |
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| ***Consequences if not approved:*** | | If the CR is not approved, the features of short vaules of PDCP discard timers, RLC T-PollRetransmit and T-StatusProhibit are not supported. | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.4, 4.2.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 38.331 | | |
| ***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 CHANGES*

### 4.2.4 PDCP Parameters

| Definitions for parameters | Per | M | FDD-TDD DIFF |
| --- | --- | --- | --- |
| ***continueROHC-Context***  Defines whether the UE supports ROHC context continuation operation where the UE does not reset the current ROHC context upon PDCP re-establishment, as specified in TS 38.323 [16]. | UE | No | No |
| ***extendedDiscardTimer-r16***  Indicates whether the UE supports the short values of PDCP discard timer. The supported short values are 0.5ms, 1ms, 2ms, 4ms, 6ms and 8ms, as specified in TS 38.331 [2]. | UE | No | No |
| ***maxNumberROHC-ContextSessions***  Defines the maximum number of header compression context sessions supported by the UE, excluding context sessions that leave all headers uncompressed. | UE | No | No |
| ***outOfOrderDelivery***  Indicates whether UE supports out of order delivery of data to upper layers by PDCP. | UE | No | No |
| ***pdcp-DuplicationMCG-OrSCG-DRB***  Indicates whether the UE supports CA-based PDCP duplication over MCG or SCG DRB as specified in TS 38.323 [16]. | UE | No | No |
| ***pdcp-DuplicationSplitDRB***  Indicates whether the UE supports PDCP duplication over split DRB as specified in TS 38.323 [16]. | UE | No | No |
| ***pdcp-DuplicationSplitSRB***  Indicates whether the UE supports PDCP duplication over split SRB1/2 as specified in TS 38.323 [16]. | UE | No | No |
| ***pdcp-DuplicationSRB***  Indicates whether the UE supports CA-based PDCP duplication over SRB1/2 and/or, if EN-DC is supported, SRB3 as specified in TS 38.323 [16]. | UE | No | No |
| ***shortSN***  Indicates whether the UE supports 12 bit length of PDCP sequence number. | UE | Yes | No |
| ***supportedROHC-Profiles***  Defines which ROHC profiles from the list below are supported by the UE:  - 0x0000 ROHC No compression (RFC 5795)  - 0x0001 ROHC RTP/UDP/IP (RFC 3095, RFC 4815)  - 0x0002 ROHC UDP/IP (RFC 3095, RFC 4815)  - 0x0003 ROHC ESP/IP (RFC 3095, RFC 4815)  - 0x0004 ROHC IP (RFC 3843, RFC 4815)  - 0x0006 ROHC TCP/IP (RFC 6846)  - 0x0101 ROHC RTP/UDP/IP (RFC 5225)  - 0x0102 ROHC UDP/IP (RFC 5225)  - 0x0103 ROHC ESP/IP (RFC 5225)  - 0x0104 ROHC IP (RFC 5225)  A UE that supports one or more of the listed ROHC profiles shall support ROHC profile 0x0000 ROHC uncompressed (RFC 5795). | UE | No | No |
| ***uplinkOnlyROHC-Profiles***  Indicates the ROHC profile(s) that are supported in uplink-only ROHC operation by the UE.  - 0x0006 ROHC TCP (RFC 6846)  A UE that supports uplink-only ROHC profile(s) shall support ROHC profile 0x0000 ROHC uncompressed (RFC 5795). | UE | No | No |

*NEXT CHANGES*

### 4.2.5 RLC parameters

| Definitions for parameters | Per | M | FDD-TDD DIFF |
| --- | --- | --- | --- |
| ***am-WithShortSN***  Indicates whether the UE supports AM DRB with 12 bit length of RLC sequence number. | UE | Yes | No |
| ***extendedT-PollRetransmit--r16***  Indicates whether the UE supports the short values of T-PollRetransmit timer. The supported short values are 1ms, 2ms, 3ms and 4ms, as specified in TS 38.331 [2]. | UE | No | No |
| ***extendedT-StatusProhibit-r16***  Indicates whether the UE supports the short values of T-StatusProhibit timer. The supported short values are 1ms, 2ms, 3ms and 4ms, as specified in TS 38.331 [2]. | UE | No | No |
| ***um-WithLongSN***  Indicates whether the UE supports UM DRB with 12 bit length of RLC sequence number. | UE | Yes | No |
| ***um-WithShortSN***  Indicates whether the UE supports UM DRB with 6 bit length of RLC sequence number. | UE | Yes | No |

*END OF CHANGES*