**3GPP TSG-RAN WG2 Meeting #116bis ElectronicR2-2203112**

**Elbonia, 17 – 25 January 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.331** | **CR** | **xxxx** | **rev** | **-** | **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 | **X** | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Introduction of UE capabilities for NR UDC | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CATT, CMCC, Huawei, HiSilicon, MediaTek, Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_UDC-Core | | | | |  | ***Date:*** | | | 2022-02-14 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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-17, NR UDC is introduced. Therefore, the corresponding UDC capabilities should be defined in the specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add UDC capabilities in the corresponding singaling. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The corresponding UE capabilities for NR UDC are missing, and as a result NR UDC function would not be supported in Rel-17. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.3.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

*First Change*

6.3.3 UE capability information elements

#### – *PDCP-Parameters*

The IE *PDCP-Parameters* is used to convey capabilities related to PDCP.

*PDCP-Parameters* information element

-- ASN1START

-- TAG-PDCP-PARAMETERS-START

PDCP-Parameters ::= SEQUENCE {

supportedROHC-Profiles SEQUENCE {

profile0x0000 BOOLEAN,

profile0x0001 BOOLEAN,

profile0x0002 BOOLEAN,

profile0x0003 BOOLEAN,

profile0x0004 BOOLEAN,

profile0x0006 BOOLEAN,

profile0x0101 BOOLEAN,

profile0x0102 BOOLEAN,

profile0x0103 BOOLEAN,

profile0x0104 BOOLEAN

},

maxNumberROHC-ContextSessions ENUMERATED {cs2, cs4, cs8, cs12, cs16, cs24, cs32, cs48, cs64,

cs128, cs256, cs512, cs1024, cs16384, spare2, spare1},

uplinkOnlyROHC-Profiles ENUMERATED {supported} OPTIONAL,

continueROHC-Context ENUMERATED {supported} OPTIONAL,

outOfOrderDelivery ENUMERATED {supported} OPTIONAL,

shortSN ENUMERATED {supported} OPTIONAL,

pdcp-DuplicationSRB ENUMERATED {supported} OPTIONAL,

pdcp-DuplicationMCG-OrSCG-DRB ENUMERATED {supported} OPTIONAL,

...,

[[

drb-IAB-r16 ENUMERATED {supported} OPTIONAL,

non-DRB-IAB-r16 ENUMERATED {supported} OPTIONAL,

extendedDiscardTimer-r16 ENUMERATED {supported} OPTIONAL,

continueEHC-Context-r16 ENUMERATED {supported} OPTIONAL,

ehc-r16 ENUMERATED {supported} OPTIONAL,

maxNumberEHC-Contexts-r16 ENUMERATED {cs2, cs4, cs8, cs16, cs32, cs64, cs128, cs256, cs512,

cs1024, cs2048, cs4096, cs8192, cs16384, cs32768, cs65536} OPTIONAL,

jointEHC-ROHC-Config-r16 ENUMERATED {supported} OPTIONAL,

pdcp-DuplicationMoreThanTwoRLC-r16 ENUMERATED {supported} OPTIONAL

]],

[[

udc-r17 SEQUENCE {

standardDictionary-r17 ENUMERATED {supported} OPTIONAL,

operatorDictionary-r17 SEQUENCE {

versionOfDictionary-r17 INTEGER (0..15),

associatedPLMN-ID-r17 PLMN-Identity

} OPTIONAL,

continueUDC-r17 ENUMERATED {supported} OPTIONAL

} OPTIONAL

]]

}

-- TAG-PDCP-PARAMETERS-STOP

-- ASN1STOP

*End of Change*