**3GPP TSG-RAN WG2 Meeting #127bis *R2-24xxxxx***

**Hefei, China, 14 – 18 October 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.331** | **CR** | **5065** | **rev** | **1** | **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:*** | Supporting R17 early implementation of R18 measurement gap enhancements | | | | | | | | | |
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| ***Source to WG:*** | Nokia, Nokia Shanghai Bell, Ericsson, ZTE Corporation, BT Plc., Telecom Italia, CATT | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_MG\_enh2-Core | | | | |  | ***Date:*** | | | 2024-10-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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:*** | | Rel-18 measurement gap enhancements were added to TS 38.331 in the CRs 4510 (R2-2313676 [relevant aspect covered by R2-2311897]) and 4063r6 (R2-2313625). Later, RAN4 sent an LS to RAN2 in R2-2407930 (R4-2413936) to request early implementation of the feature associated with *nr-NeedForInterruptionReport-r18*, starting from Rel-17.  To support early implementation of this feature, the corresponding CRs adding the feature need to be captured in Annex C of the specification (List of CRs Containing Early Implementable Features and Corrections). | | | | | | | | |
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| ***Summary of change:*** | | Add the CR 4063r6 to the List of CRs Containing Early Implementable Features and Corrections in Table C-1 of Annex C and capture that the CRs can be implemented starting from Rel-17.  Clarify that early implementation of CR 4063r6 also includes the corresponding capability of R2-2311897 (added within CR 4510 of RP-233940).  **Impact analysis**  Impacted functionality: Measurements without gap with/without interruption.  Inter-operability:   1. If the network is implemented according to the CR and the UE is not there is no inter-operability issue expected; however, a Rel-17 UE would not support the Rel-18 MGE feature by early implementation. 2. If the UE is implemented according to the CR and the network is not there is no inter-operability issue expected. | | | | | | | | |
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| ***Consequences if not approved:*** | | Rel-17 UE will not be able to support Rel-18 MGE feature associated with *nr-NeedForInterruptionReport-r18* by early implementation. | | | | | | | | |
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| ***Clauses affected:*** | | Annex C | | | | | | | | |
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|  | | **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 Modified Subclause*

Annex C (normative): List of CRs Containing Early Implementable Features and Corrections

This annex lists the Change Requests (CRs) whose changes may be implemented by a UE of an earlier release than which the CR was approved in (i.e. CRs that contain on their coversheets the sentence "Implementation of this CR from Rel-N will not cause interoperability issues").

Table C-1: List of CRs Containing Early Implementable Features and Corrections

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| --- | --- | --- | --- | --- |
| TDoc Number (RP-xxxxxx): CR Title | CR Number(s) | CR Revision Number(s) | Earliest Implementable Release | Additional Information |
| RP-200335: Correction on usage of access category 2 for UAC for RNA update | 1141 | 2 | Release 15 |  |
| RP-201185: Introduction of signalling for high-speed train scenarios | 1464 | 5 | Release 15 |  |
| RP-201216: Release-16 UE capabilities based on RAN1, RAN4 feature lists and RAN2 | 1665 | 2 | Release 15 | Early implementation part is referring to the aspect covered by  - R2-2006203: Extension of CSI-RS capabilities per codebook type  - R2-2006360: Intraband EN\_DC power class expansion for 29 dBm |
| RP-202768: UE behaviour when UL 7.5KHz shift is not supported | 2107 | 2 | Release 15 |  |
| RP-202790: Correction on uac-AccessCategory1-SelectionAssistanceInfo | 2130 | 1 | Release 15 |  |
| RP-211483: Clarification on the initiation of RNA update | 2581 | 1 | Release 15 |  |
| RP-201190: Introduction of eCall over IMS for NR | 1670 | - | Release 15 |  |
| RP-212598: Distinguishing support of extended band n77 | 2810 | 2 | Release 15 |  |
| RP-213342: Duty cycle signalling for power class 1.5 | 2817 | 1 | Release 15 |  |
| RP-213345: CR on 38.331 for introducing UE capability of txDiversity | 2859 | 1 | Release 15 |  |
| RP-220497: Introduction of function for RRM enhancements for Rel-17 NR FR1 HST | 2898 | 2 | Release 16 |  |
| RP-220838: Release-17 UE capabilities based on R1 and R4 feature lists (TS38.331) | 2901 | 1 | Release 15 | Early implementation part is referring to the aspect covered by:  - R2-2203898: Introduction of BCS4 and BCS5  - R2-2203836: Introducing UE capability for power class 5 for FR2 FWA |
| RP-221721: CR on the CBM/IBM reporting-38331 | 2916 | 2 | Release 16 |  |
| RP-221736: Distinguishing support of band n77 restrictions in Canada [n77 Canada] | 3078 | 2 | Release 15 |  |
| RP-222527: Correction to additionalSpectrumEmission for UL CA in n77 for the US | 3476 | - | Release 15 |  |
| RP-222527: Correction to additionalSpectrumEmission for UL CA in n77 for Canada | 3478 | - | Release 15 |  |
| RP-232570: Addition of extended number range for NS value | 3900 | 6 | Release 16 |  |
| RP-233888: Introduction of FR2 FBG2 CA BW classes | 2867 | 6 | Release 15 |  |
| RP-233882: Enhancing SCell A2 event reporting | 4375 | 2 | Release 15 |  |
| RP-233890: PTM retransmission reception for multicast DRX with HARQ feedback disabled [PTM\_ReTx\_Mcast\_HARQ\_Disb] | 4504 | - | Release 17 |  |
| RP-240667: UE capability for Enhanced channel raster | 4445 | 3 | Release 16 |  |
| RP-240658: Introduction of TxDiversity for 2Tx capability | 4639 | 2 | Release 17 |  |
| RP-241543: Introduction of barring exemption for RedCap UEs for emergency calls | 4570 | 4 | Release 17 |  |
| RP-241543: Correction on Redcap 1 Rx and 2 Rx barring | 4632 | 5 | Release 17 |  |
| RP-241544: Correction on TRS in idle and inactive | 4755 | 3 | Release 17 |  |
| RP-241544: Clarification RLM/BFD relaxation and short DRX | 4771 | 2 | Release 17 |  |
| RP-233915: Introduction of further measurement gap enhancements | 4063 | 6 | Release 17 | Early implementation part is referring to all aspects other than effective measurement window. Early implementation also includes the corresponding capability of R2-2311897 (within CR 4510 of RP-233940). |

*End of Changes*