**3GPP TSG-RAN WG2 Meeting #128 *R2-241XXXX***

**Orlando, USA, 18 – 22 November 2024**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** | **-** | **Current version:** |  |  |
|  |
| *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:***  |  |
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| ***Source to WG:*** | Nokia |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_enh2-Core |  | ***Date:*** | 2024-11-20 |
|  |  |  |  |  |
| ***Category:*** |  |  | ***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 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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | In Rel-18 the SON/MDT functionality was enhanced to support NR-U (LBT) related enhancements. Adding this information to SON reports should be optional. |
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| ***Summary of change:*** | Clarified that NR-U related information in SCGFailureInformation is optional*.***Impact analysis**Architecture options:NR-DCImpacted functionality: SCG failure information reporting and NR-UInter-operability: 1. If the network is implemented according to the CR and the UE is not then there is no inter-operability issue.
2. If the UE is implemented according to the CR and the network is not then there is no inter-operability issue.
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| ***Consequences if not approved:*** | It is not clarified that NR-U related information is optional in SCGFailureInformation. |
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| ***Clauses affected:*** | 5.7 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 38.331 CR 5126  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

*First Modified Subclause*

## 5.7 MDT and SON features

| Definitions for feature |
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| **Cross RAT RLF Report**It is optional for UE to support the delivery of EUTRA RLF report to an NR node upon request from the network. |
| **Mobility history information storage**It is optional for UE to support the storage of PCell mobility history information and the reporting in *UEInformationResponse* message as specified in TS 38.331 [9]. |
| **Radio Link Failure Report for inter-RAT MRO EUTRA**It is optional for UE to support:- Inclusion of EUTRA CGI and associated TAC, if available, and otherwise to include the physical cell identity and carrier frequency of the target PCell of the failed handover as *failedPCellId* in *RLF-Report* upon request from the network as specified in TS 38.331 [9].- Inclusion of EUTRA CGI and associated TAC as *previousPCellId* in *RLF-Report* as specified in TS 38.331 [9].- Inclusion of *eutraReconnectCellId* in *reconnectCellId* in the *RLF-Report* as specified in TS 38.331 [9] upon UE has radio link failure or handover failure and successfully re-connected to an E-UTRA cell. |
| **RACH Partitioning Information**It is optional for UE to support the delivery of RACH partitioning related information via RACH report procedure, upon request from the network. |
| **RLF report after successful fast MCG recovery**It is optional for UE to support logging *previousPCellId*, *lastHO-Type*, and *timeConnFailure* when T316 was not running before entering the PCell in which the radio link failure was detected. |
| **RLF Report for Fast MCG Recovery**It is optional for UE to support the delivery of the Fast MCG recovery related information in the RLF-Report. |
| **RLF Report for Inter-system HO for Voice Fallback**It is optional for UE to support the delivery of an explicit indication in the RLF-report when mobility from NR due to voice fallback fails. |
| **SCG Failure Report for CPAC**It is optional for UE to support the delivery of the CPAC related parameters for MRO in *SCGFailureInformation* message to the network. |
| **SCG Failure Report for MRO**It is optional for UE to support the delivery of the SCG failure related parameters for MRO in *SCGFailureInformation* message to the network. |
| **SON enhancements for NR-U**It is optional for UE to support the delivery of NR-U related information (FR1 only) in RA-report/SHR/RLF/ SCGFailureInformation report, upon request from the network. |
| **SON Report in SNPN**It is optional for UE to support collection and delivery of SON reports in SNPN. UE is not required to support all SON reports if it supports collection and delivery of the SON reports in SNPN, it may support one or more SON report for SNPN. |
| **SpCell ID indication**It is optional for UE to support the delivery of the *spCellID-r17* in the RA-Report, if the RA procedure is performed in a SCell of the MCG/SCG. |
| **Uplink PDCP delay measurements upon MO update**It is optional for UE to support not resetting the UL PDCP Packet Average Delay measurement or UL PDCP excess packet delay measurement when the associated measurement object is modified. A UE supporting this feature shall also indicate the support of at least one of *ulPDCP-Delay-r16* and *excessPacketDelay-r17*. |

*End of Changes*