**3GPP TSG-RAN WG3 Meeting #129-bis *R3-257235***

Prague, Czech Republic, 13th ~17th Oct, 2025

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| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.473** | **CR** | **1641** | **Rev** | **-** | **Current version:** | **19.0.0** |  |
|  |
| *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 |  | Radio Access Network | **x** | Core Network |  |

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| --- |
|  |
| ***Title:***  | Correction for LTM failure without RLF-report |
|  |  |
| ***Source to WG:*** | NEC, Huawei, Ericsson, Nokia, Google, CATT, ZTE, Samsung |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_Ph4-Core |  | ***Date:*** | 2025-10-16 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-19 |
|  | *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)* |
|  |  |
| ***Reason for change:*** | There was an agreement to enable failure indication without RLF report, and a basic solution in stage3 was introduced, but this solution needs to be refined. |
|  |  |
| ***Summary of change:*** | Revised the information carried for the failure reporting without RLF report including replace the source C-RNTI with gNB-DU UE F1AP ID, and change LTM failure type from optional to mandatory. |
|  |  |
| ***Consequences if not approved:*** | No working solution for failure reporting without RLF report. |
|  |  |
| ***Clauses affected:*** | 9.2.10.1, 9.4.4, 9.4.5, and 9.4.7 |
|  |  |
|  | **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:*** |  |

**<< Start of Changes >>**

#### 9.2.10.1 ACCESS AND MOBILITY INDICATION

This message is sent by gNB-CU to gNB-DU to provide access and mobility information to the gNB-DU.

Direction: gNB-CU → gNB-DU.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | ignore |
| Transaction ID | M |  | 9.3.1.23 |  | YES | reject |
| **RA Report List** |  | *0..1* |  |  | YES | ignore |
| **>RA Report Item** |  | *1 .. <maxnoofRAReports>* |  |  | - |  |
| >>RA Report Container | M |  | OCTET STRING | Includes the *RA-ReportList-r16* IE as defined in subclause 6.2.2 in TS 38.331 [8]. | - |  |
| >>UE Assistant Identifier  | O |  | gNB-DU UE F1AP ID9.3.1.5 |  | - |  |
| **RLF Report Information List** |  | *0..1* |  |  | YES | ignore |
| **>RLF Report Information Item** |  | *1 .. <**maxnoofRLFReports>* |  |  | - |  |
| >>NR UE RLF Report Container | M |  | OCTET STRING | Includes the *nr-RLF-Report-r16* IE contained in the *UEInformationResponse* message defined in TS 38.331 [8]. | - |  |
| >>UE Assistant Identifier | O |  | gNB-DU UE F1AP ID9.3.1.5 |  | - |  |
| >>C-RNTI | O |  | 9.3.1.32 | C-RNTI allocated at the source gNB-DU. This IE is included in case the gNB-DU responsible for the LTM failure is not the gNB-DU serving the UE at the time of LTM failure. | YES | ignore |
| >>RLF Report Failure Type | O |  | ENUMERATED (too late LTM, too early LTM, LTM to wrong cell,...) |  | YES | ignore |
| **Successful HO Report Information List** |  | *0..1* |  |  | YES | ignore |
| **>Successful HO Report Information Item** |  | *1 .. <maxnoofSuccessfulHOReports>* |  |  | - |  |
| >>Successful HO Report Container | M |  | OCTET STRING | Includes the *SuccessHO-Report* IE as defined in subclause 6.2.2 in TS 38.331 [8]. | - |  |
| **Successful PSCell Change Report Information List** |  | *0..1* |  |  | YES | ignore |
| **>Successful PSCell Change Report information Item** |  | *1..<maxnoofSuccessfulPSCellChangeReports>* |  |  | - |  |
| >>Successful PSCell Change Report Container | M |  | OCTET STRING | Includes the *SuccessPSCell-Report* IE as defined in TS 38.331 [8]. | - |  |
| **Failure Reporting without RLF report** |  | *0..1* |  |  |  |  |
| >NR CGI | M |  | 9.3.1.12 | NR CGI for the re-establishment or recovery cell. | - |  |
| > gNB-DU UE F1AP ID  | M |  | 9.3.1.5 |  | - |  |
| >Failure Type | M |  | ENUMERATED (too late LTM, too early LTM, LTM to wrong cell,...) |  | YES | ignore |
| **MRO for LTM Information** |  | *0..1* |  |  | YES | ignore |
| >gNB-DU UE F1AP ID | M |  | 9.3.1.5 |  | - |  |
| >BFR SSB Index | O |  | INTEGER (0..63) | SSB Index of the recovery beam used at successful Beam Failure Recovery. | - |  |
| >Target SSB Index after Cell Switch Failure | O |  | INTEGER (0..63) | SSB Index of the re-established or recovery beam after LTM Cell Switch Failure. | - |  |
| >TA Information | O |  | INTEGER (0..4095) | Indicates the TA value, as defined in TS 38.213 [31], used at successful Random Access during LTM recovery or re-establishment after a Cell Switch failure in same cell. | - |  |

| Range bound | Explanation |
| --- | --- |
| maxnoofRAReports | Maximum no. of RA Reports, the maximum value is 64. |
| maxnoofRLFReports | Maximum no. of RLF Reports, the maximum value is 64. |
| maxnoofSuccessfulHOReports | Maximum no. of Successful HO Reports, the maximum value is 64. |
| maxnoofSuccessfulPSCellChangeReports | Maximum no. of Successful PSCell Change Reports. Value is 64. |

**<< The Next Changes >>**

### 9.4.4 PDU Definitions

<SKIP>

 LPWUSPSAssistanceInfo,

 FurtherExtendedUEIdentityIndexValue,

 CLI-MeasurementResult-List,

 SRS-Resource-Indication,

 FailureReportingWithoutRLFReport,

 MROForLTM-Information,

 LastVisitedLTMCells,

 OnDemand-SIB1-Cell,

 LTMSecurityInformation,

 LTMInformationSCGAdd,

<SKIP>

 id-LPWUSPSAssistanceInfo,

 id-FurtherExtendedUEIdentityIndexValue,

 id-CLI-MeasurementResult-List,

 id-SRS-Resource-Indication,

 id-FailureReportingWithoutRLFReport,

 id-MROForLTM-Information,

 id-LastVisitedLTMCells,

 id-OnDemand-SIB1-Cell,

 id-LTMSecurityInformation,

<SKIP>

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-- Access And Mobility Indication ELEMENTARY PROCEDURE

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-- Access And Mobility Indication

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-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

AccessAndMobilityIndication ::= SEQUENCE {

 protocolIEs ProtocolIE-Container { { AccessAndMobilityIndicationIEs} },

 ...

}

AccessAndMobilityIndicationIEs F1AP-PROTOCOL-IES ::= {

 { ID id-TransactionID CRITICALITY reject TYPE TransactionID PRESENCE mandatory }|

 { ID id-RAReportList CRITICALITY ignore TYPE RAReportList PRESENCE optional }|

 { ID id-RLFReportInformationList CRITICALITY ignore TYPE RLFReportInformationList PRESENCE optional }|

 { ID id-SuccessfulHOReportInformationList CRITICALITY ignore TYPE SuccessfulHOReportInformationList PRESENCE optional }|

 { ID id-SuccessfulPSCellChangeReportInformationList CRITICALITY ignore TYPE SuccessfulPSCellChangeReportInformationList PRESENCE optional }|

 { ID id-FailureReportingWithoutRLFReport CRITICALITY ignore TYPE FailureReportingWithoutRLFReport PRESENCE optional }|

 { ID id-MROForLTM-Information CRITICALITY ignore TYPE MROForLTM-Information PRESENCE optional },

 ...

}

**<< The Next Changes >>**

### 9.4.5 Information Element Definitions

<SKIP>

FailureReportingWithoutRLFReport ::= SEQUENCE {

 reestRecoveryCGI NRCGI,

 gNB-CUorDU-UE-F1AP-ID GNB-CUorDU-UE-F1AP-ID,

 FailureType RLFReportFailureType,

 iE-Extensions ProtocolExtensionContainer { { FailureReportingWithoutRLFReport-ExtIEs } } OPTIONAL,

 ...

}

FailureReportingWithoutRLFReport-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

 ...

}

**<< The Next Changes >>**

9.4.7 Constant Definitions

<SKIP>

id-NZP-CSI-RS-Resources-Config ProtocolIE-ID ::= 884

id-SRS-Resource-Indication ProtocolIE-ID ::= 885

id-SRS-Resource-Configuration ProtocolIE-ID ::= 886

id-rLFReportFailureType ProtocolIE-ID ::= 887

id-FailureReportingWithoutRLFReport ProtocolIE-ID ::= 888

id-MROForLTM-Information ProtocolIE-ID ::= 889

id-LastVisitedLTMCells ProtocolIE-ID ::= 890

id-OnDemandSIB1 ProtocolIE-ID ::= 891

id-PagingAdaptationIndication ProtocolIE-ID ::= 892

id-OnDemand-SIB1-Cell ProtocolIE-ID ::= 893

**<< End of Changes >>**