3GPP TSG-RAN WG3 Meeting #109-e R3-20xxxx

**Online, 17th – 27th August 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.423** | **CR** | **<CR#>** | **rev** | **-** | **Current version:** | **16.2.0** |  |
|  | | | | | | | | |
| *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:*** | Restructuring FAILURE INDICATION message – avoid condition upon absence of IE | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Rapporteur (Ericsson) | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_SON\_MDT-Core | | | | |  | ***Date:*** | | | 2020-08-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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:*** | | The current specification of the FAILURE INDICATION message contains a condition for the presence of an IE which is based on the absence of another IE. Such conditions should be avoided as much as possible. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The FAILURE INDICATION message was re-structured to contain sub-IEs defined with a CHOICE type, which allows avoiding conditions based on absence of IEs.  Impact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has isolated impact with the previous version of the specification (same release) because it corrects the specification of the FAILURE INDICATION message only.  The impact can be considered isolated because the change affects only the FAILURE INDICATION message.  This CRs affects ASN.1 in a non-backwards compatible way. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | IE presence conditions based on the absence of another IE would still be contained in XnAP | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.1.3.16, 9.3.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

<<<<<<<<<<<<<<<<<<<< First Change >>>>>>>>>>>>>>>>>>>>

#### 9.1.3.16 FAILURE INDICATION

This message is sent by NG-RAN node2 to indicate an RRC re-establishment attempt or a reception of an RLF Report from a UE that suffered a connection failure at NG-RAN node1.

Direction: NG-RAN node2 → NG-RAN node1.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Message Type | M |  | 9.2.3.1 |  | YES | ignore |
| CHOICE *Initiating condition* | M |  |  |  | YES | reject |
| >*RRC Reestab* |  |  |  |  |  |  |
| >>CHOICE *RRC Reestab Initiated Reporting* |  |  |  |  | – |  |
| >>>*RRC Reestab Reporting without RLF Report* |  |  |  |  |  |  |
| >>>>Failure cell PCI | M |  | 9.2.2.10 | Physical Cell Identifier | – |  |
| >>>>Re-establishment cell CGI | M |  | Global NG-RAN Cell Identity  9.2.2.27 |  | – |  |
| >>>>C-RNTI | M |  | BIT STRING (SIZE (16)) | C-RNTI contained in the *RRCRe-establishment*  *Request* message (TS 38.331 [10]) or in the *RRCConnectionReestablishmentRequest* message (TS 36.331 [14]) | – |  |
| >>>>ShortMAC-I | M |  | BIT STRING (SIZE (16)) | ShortMAC-I contained in the *RRCRe-establishment Request* message (TS 38.331 [10]) or in the *RRCConnectionReestablishmentRequest* message (TS 36.331 [14]) | – |  |
| >>>*RRC Reestab Reporting with RLF Report* |  |  |  |  |  |  |
| >>>>UE RLF Report Container | M |  | 9.2.2.59 | *nr-RLF-Report-r*16 IE contained in the *UEInformationResponse* message (TS 38.331 [10]) or *RLF-Report-r9* IE contained in the *UEInformationResponse* message (TS 36.331 [14]) | – |  |
| >*RRC Setup* |  |  |  |  |  |  |
| >>CHOICE *RRC Setup Initiated Reporting* |  |  |  |  | – |  |
| >>>*RRC Setup Reporting with RLF Report* |  |  |  |  |  |  |
| >>>>UE RLF Report Container | M |  | 9.2.2.59 | *nr-RLF-Report-r*16 IE contained in the *UEInformationResponse* message (TS 38.331 [10]) or *RLF-Report-r9* IE contained in the *UEInformationResponse* message (TS 36.331 [14]) | – |  |



<<<<<<<<<<<<<<<<<<<< Next Change >>>>>>>>>>>>>>>>>>>>

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### 9.3.5 Information Element definitions

-- ASN1START

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

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-- Information Element Definitions

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

XnAP-IEs {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

ngran-access (22) modules (3) xnap (2) version1 (1) xnap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

<<<<<<<<<<<<<<<<<<<< Unmodified Text omitted >>>>>>>>>>>>>>>>>>>>

<<<<<<<<<<<<<<<<<<<< Begin quotation for info >>>>>>>>>>>>>>>>>>>>

InitiatingCondition-FailureIndication ::= CHOICE {

rRCReestab RRCReestab-initiated,

rRCSetup RRCSetup-initiated,

choice-extension ProtocolIE-Single-Container { {InitiatingCondition-FailureIndication-ExtIEs} }

}

InitiatingCondition-FailureIndication-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

<<<<<<<<<<<<<<<<<<<< End Quotation for info >>>>>>>>>>>>>>>>>>>>

<<<<<<<<<<<<<<<<<<<< Unmodified Text omitted >>>>>>>>>>>>>>>>>>>>

RRCReestab-initiated ::= SEQUENCE {

rRRCReestab-initiated-reporting RRCReestab-Initiated-Reporting,

iE-Extensions ProtocolExtensionContainer { { RRCReestab-initiated-ExtIEs} } OPTIONAL,

...

}

RRCReestab-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCReestab-Initiated-Reporting ::= CHOICE {

rRCReestab-reporting-wo-UERLFReport RRCReestab-Initiated-Reporting-wo-UERLFReport,

rRCReestab-reporting-with-UERLFReport RRCReestab-Initiated-Reporting-with-UERLFReport,

choice-extension ProtocolIE-Single-Container { {RRCReestab-Initiated-Reporting-ExtIEs} }

}

RRCReestab-Initiated-Reporting-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

RRCReestab-Initiated-Reporting-wo-UERLFReport ::= SEQUENCE {

failureCellPCI NG-RAN-CellPCI,

reestabCellCGI GlobalNG-RANCell-ID,

c-RNTI C-RNTI,

shortMAC-I MAC-I,

iE-Extensions ProtocolExtensionContainer { { RRCReestab-Initiated-Reporting-wo-UERLFReport-ExtIEs} } OPTIONAL,

...

}

RRCReestab-Initiated-Reporting-wo-UERLFReport-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCReestab-Initiated-Reporting-with-UERLFReport ::= SEQUENCE {

uERLFReportContainer UERLFReportContainer,

iE-Extensions ProtocolExtensionContainer { {RRCReestab-Initiated-Reporting-with-UERLFReport-ExtIEs} } OPTIONAL,

...

}

RRCReestab-Initiated-Reporting-with-UERLFReport-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCSetup-initiated ::= SEQUENCE {

rRRCSetup-Initiated-Reporting RRCSetup-Initiated-Reporting,

uERLFReportContainer UERLFReportContainer OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { RRCSetup-initiated-ExtIEs} } OPTIONAL,

...

}

RRCSetup-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCSetup-Initiated-Reporting ::= CHOICE {

rRCSetup-reporting-with-UERLFReport RRCSetup-Initiated-Reporting-with-UERLFReport,

choice-extension ProtocolIE-Single-Container { {RRCSetup-Initiated-Reporting-ExtIEs} }

}

RRCSetup-Initiated-Reporting-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

RRCSetup-Initiated-Reporting-with-UERLFReport ::= SEQUENCE {

uERLFReportContainer UERLFReportContainer,

iE-Extensions ProtocolExtensionContainer { {RRCSetup-Initiated-Reporting-with-UERLFReport-ExtIEs} } OPTIONAL,

...

}

RRCSetup-Initiated-Reporting-with-UERLFReport-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

<<<<<<<<<<<<<<<<<<<< End of Changes >>>>>>>>>>>>>>>>>>>>