**3GPP TSG-RAN WG3 Meeting #110-e *R3-207102***

**E-meeting, 2 – 12 Nov 2020 was R3-206449**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.413** | **CR** | **0010** | **rev** | **1** | **Current version:** | 16.1.0 |  |
|  | | | | | | | | |
| *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 | **X** |

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| ***Title:*** | Handling OVERLOAD START message in the N3IWF | | | | | | | | | |
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| ***Source to WG:*** | Huawei, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | RAN3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2020-10-23 |
|  |  | | | |  | |  | | |  |
| ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | For non-3GPP access, the following establishment causes are not used.  *- mt-Access, mo-VoiceCall, mo-VideoCall, mo-SMS, notAvailable, mo-ExceptionData*  But the establishment cause value in the INITIAL UE MESSAGE, refers to TS 23.502, including all (RRC) establishment cause values.  Further, the procedural texts on Overload Action IE in TS 38.413 describe all (RRC) cause values. It should be clarified that for non-3GPP access, that cause values only applicabe to non-3GPP access are used for overload control message in TS 29.413. | | | | | | | | |
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| ***Summary of change:*** | | Update the reference of establishment cause in INITIAL UE MESSAGE from TS 23.502 to TS 24.502.  Update that only establishment cause values specified in TS 24.502 are used for the identification of traffic for the Overload Action IE in Overload Start message.      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 clarifies that cause values only applicable to non-3GPP access are considered for Overload Start and Initial UE message.  The impact can be considered isolated because the change only affects the overload control function for non-3GPP access. | | | | | | | | |
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| ***Consequences if not approved:*** | | It may be incorrectly considered that all the establishment causes in the Initial UE message and the Overload Start procedure can be applicable to non-3GPP access. Also, the RAN3 spec does not align with CT1 specification. | | | | | | | | |
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| ***Clauses affected:*** | | 2, 5.3 | | | | | | | | |
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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:*** | | V0: R3-206449  V1: R3-207102  Update based on online comments, e.g. update the Category to have R16-only CR, and update corresponding procedural texts. | | | | | | | | |

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| **Change Begins** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 38.413: "NG-RAN; NG Application Protocol (NGAP)".

[3] 3GPP TS 23.501: "System Architecture for the 5G System".

[4] 3GPP TS 23.502: "Procedures for the 5G System".

[5] 3GPP TS 33.501: "Security architecture and procedures for 5G system".

[6] 3GPP TS 23.316: "Wireless and wireline convergence access support for the 5G System (5GS)".

[x] 3GPP TS 24.502: "Access to the 3GPP 5G Core Network (5GCN) via Non-3GPP Access Networks (N3AN)".

**<Unchanged Text Omitted>**

## 5.3 Exceptions for NGAP message contents and information element coding when used for non-3GPP access

**<Unchanged Text Omitted>**

INITIAL UE MESSAGE message:

- *RRC Establishment Cause* IE: the information given within this IE is to indicate the Establishment cause for non-3GPP access as specified in TS 24.502 [x].

- *Selected PLMN Identity* IE: the information given within this IE provides the selected PLMN ID for untrusted non-3GPP access as specified in TS 23.502 [4].

- *Authenticated Indication* IE: the information given within this IE between the W-AGF and the AMF is to indicate that the FN-RG has been authenticated by the wireline 5G access network as specified in TS 23.316 [6].

- *Selected PLMN Identity* IE: the information given within this IE contains the PLMN Identity for wireline access as specified in TS 23.316 [6], or for trusted non-3GPP access as specified in TS 23.502 [4].

DOWNLINK NAS TRANSPORT message:

- the following IEs shall be ignored, when received:

- *RAN Paging Priority* IE

- *MobilityRestriction List* IE

- *Index to RAT/Frequency Selection Priority* IE

UPLINK NAS TRANSPORT message:

- *TNGF Identity Information* IE: the information given within this IE between the TNGF and the AMF contains a list of identifiers of NG-U terminations at TNGF as specified in TS 23.502 [4].

- *TWIF Identity Information* IE: the information given within this IE between the TWIF and the AMF contains a list of identifiers of NG-U terminations at TWIF as specified in TS 23.502 [4].

- *W-AGF Identity Information* IE: the information given within this IE between the W-AGF and the AMF contains a list of identifiers of NG-U terminations at W-AGF as specified in TS 23.316 [6].

NG SETUP REQUEST message:

- the following IEs shall be ignored, when received:

- *Default Paging DRX* IE

RAN CONFIGURATION UPDATE message:

- the following IEs shall be ignored, when received:

- *Default Paging DRX* IE

OVERLOAD START message:

- *AMF Overload Response* IE: if the *Overload Action* IE is included, the contained information is used to identify the related signalling traffic corresponding to the Establishment cause for non-3GPP access as specified in TS 24.502 [x].

- *Slice Overload Response* IE: if the *Overload Action* IE is included, the contained information is used to identify the related signalling traffic corresponding to the Establishment cause for non-3GPP access as specified in TS 24.502 [x].

The *Global RAN Node ID* IE in the applicable NGAP messages includes the following IEs as specified in TS 38.413 [2]:

- *Global N3IWF ID* IE for the untrusted non-3GPP access.

- *Global TNGF ID* IE for the trusted non-3GPP access.

- *Global TWIF ID* IE for the trusted WLAN access.

- *Global W-AGF ID* IE for the wireline 5G access.

The *User Location Information* IE in the applicable NGAP messages includes the following IEs as specified in TS 38.413 [2]:

- *IP address* IE and *port number* IE for the untrusted non-3GPP access.

- *TNGF User Location Information* IE for the trusted non-3GPP access.

- *TWIF User Location Information* IE for the trusted WLAN access.

- *W-AGF User Location Information* IE for the wireline 5G access.

The *Security Key* IE in the applicable NGAP messages includes the KN3IWF, or the KTNGF, or the KTWIF, or the KWAGF as specified in TS 33.501 [5].

The *RAN UE NGAP ID* IE in the applicable NGAP messages identifies the UE association over the NG interface within the N3IWF node, or the TNGF node, or the TWIF node, or the W-AGF node, as specified in TS 38.413 [2].

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| **Change Ends** |