**3GPP TSG-RAN WG3 #123 *R3-240863***

**Athens, Greece, 26th February- 1st March 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.413** | **CR** | **1108** | **rev** | **1** | **Current version:** | **17.7.0** |  |
|  | | | | | | | | |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <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:*** | Correction on mobility restriction from NR to E-UTRA NTN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | ZTE, Ericsson, Vodafone, Thales Alenia Space, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_NTN\_solutions | | | | |  | ***Date:*** | | | 2024-02-27 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | An operator with satellite and terrestrial access should be able to restrict usage of satellite access for specific subscriptions; SA2 has identified some access restriction cases not currently covered. New codepoints need to be added. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Introduce a new IE “*Additional Primary RAT Restriction*” with 4 codepoints for E-UTRA-LEO/MEO/GEO/OTHERSAT in the *Extended RAT Restriction Information* IE.  Impact analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has an isolated impact towards the previous version of the specification (same release). | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The operator cannot restrict the access from NR to E-UTRA NTN. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.3.1.126, 9.4.5, 9.4.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **x** |  | Other core specifications | | | | TS 36.413 CR 1923  TS 36.423 CR 1765  TS 38.423 CR 1201 | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev 0: R3-240643  Rev 1: Update the CR cover page; Remove the change on the textual description of *Mobility Restriction List* IE; Change the criticality of the newly introduced IE from “reject” to “ignore”. | | | | | | | | |

<<<<<<<<<<<<<<<<<<<< Start of Changes >>>>>>>>>>>>>>>>>>>>

#### 9.3.1.126 Extended RAT Restriction Information

This IE provides RAT restrictions as specified in TS 23.501 [9].

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| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Primary RAT Restriction | M |  | BIT STRING {  e-UTRA (0),  nR (1), nR-unlicensed (2), nR-LEO (3),  nR-MEO (4),  nR-GEO (5),  nR-OTHERSAT (6)}  (SIZE(8, …)) | Each position in the bitmap represents a Primary RAT.  If a bit is set to "1", the respective RAT is restricted for the UE.  If a bit is set to "0", the respective RAT is not restricted for the UE.  Bit 7 reserved for future use.  The Primary RAT is the RAT used in the access cell, or target cell. | - |  |
| Secondary RAT Restriction | M |  | BIT STRING {  e-UTRA (0),  nR (1), e-UTRA-unlicensed (2), nR-unlicensed (3)}  (SIZE(8, …)) | Each position in the bitmap represents a Secondary RAT.  If a bit is set to "1", the respective RAT is restricted for the UE.  If a bit is set to "0", the respective RAT is not restricted for the UE.  Bits 4-7 reserved for future use.  A Secondary RAT is a RAT, distinct from the UE’s primary RAT, used in any cell serving the UE excluding the PCell. | - |  |
| Additional Primary RAT Restriction | O |  | BIT STRING {  e-UTRA-LEO (0),  e-UTRA-MEO (1), e-UTRA-GEO (2), e-UTRA-OTHERSAT (3)}  (SIZE(8, …)) | Each position in the bitmap represents a Primary RAT.  If a bit is set to "1", the respective RAT is restricted for the UE.  If a bit is set to "0", the respective RAT is not restricted for the UE.  Bits 4-7 reserved for future use.  The Primary RAT is the RAT used in the access cell, or target cell. | YES | ignore |

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

### 9.4.5 Information Element Definitions

-- ASN1START

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-- Information Element Definitions

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

NGAP-IEs {

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

ngran-Access (22) modules (3) ngap (1) version1 (1) ngap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

id-AdditionalDLForwardingUPTNLInformation,

id-AdditionalULForwardingUPTNLInformation,

id-AdditionalDLQosFlowPerTNLInformation,

id-AdditionalDLUPTNLInformationForHOList,

id-AdditionalNGU-UP-TNLInformation,

id-AdditionalRedundantDL-NGU-UP-TNLInformation,

id-AdditionalRedundantDLQosFlowPerTNLInformation,

id-AdditionalRedundantNGU-UP-TNLInformation,

id-AdditionalRedundantUL-NGU-UP-TNLInformation,

id-AdditionalUL-NGU-UP-TNLInformation,

id-AlternativeQoSParaSetList,

>>Unchanged Skipped<<

id-UserLocationInformationW-AGF,

id-EarlyMeasurement,

id-BeamMeasurementsReportConfiguration,

id-TAI,

id-HFCNode-ID-new,

id-GlobalCable-ID-new,

id-AdditionalPrimaryRATRestriction,

maxnoofAllowedAreas,

maxnoofAllowedCAGsperPLMN,

maxnoofAllowedS-NSSAIs,

maxnoofBluetoothName,

>>Unchanged Skipped<<

-- A

AdditionalDLUPTNLInformationForHOList ::= SEQUENCE (SIZE(1..maxnoofMultiConnectivityMinusOne)) OF AdditionalDLUPTNLInformationForHOItem

AdditionalDLUPTNLInformationForHOItem ::= SEQUENCE {

additionalDL-NGU-UP-TNLInformation UPTransportLayerInformation,

additionalQosFlowSetupResponseList QosFlowListWithDataForwarding,

additionalDLForwardingUPTNLInformation UPTransportLayerInformation OPTIONAL,

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

...

}

AdditionalDLUPTNLInformationForHOItem-ExtIEs NGAP-PROTOCOL-EXTENSION ::= {

{ ID id-AdditionalRedundantDL-NGU-UP-TNLInformation CRITICALITY ignore EXTENSION UPTransportLayerInformation PRESENCE optional },

...

}

AdditionalQosFlowInformation ::= ENUMERATED {

more-likely,

...

}

AdditionalPrimaryRATRestriction ::= BIT STRING (SIZE(8, ...))

>>Unchanged Skipped<<

ExtendedRATRestrictionInformation ::= SEQUENCE {

primaryRATRestriction BIT STRING (SIZE(8, ...)),

secondaryRATRestriction BIT STRING (SIZE(8, ...)),

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

...

}

ExtendedRATRestrictionInformation-ExtIEs NGAP-PROTOCOL-EXTENSION ::= {

{ ID id-AdditionalPrimaryRATRestriction CRITICALITY ignore EXTENSION AdditionalPrimaryRATRestriction PRESENCE optional },

...

}

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

### 9.4.7 Constant Definitions

-- ASN1START

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

--

-- Constant definitions

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

NGAP-Constants {

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

ngran-Access (22) modules (3) ngap (1) version1 (1) ngap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

--

-- IE parameter types from other modules.

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

IMPORTS

ProcedureCode,

ProtocolIE-ID

FROM NGAP-CommonDataTypes;

>>Unchanged Skipped<<

id-EarlyMeasurement ProtocolIE-ID ::= 360

id-BeamMeasurementsReportConfiguration ProtocolIE-ID ::= 361

id-HFCNode-ID-new ProtocolIE-ID ::= 362

id-GlobalCable-ID-new ProtocolIE-ID ::= 363

id-TargetHomeENB-ID ProtocolIE-ID ::= 364

id-HashedUEIdentityIndexValue ProtocolIE-ID ::= 365

id-ExtendedMobilityInformation ProtocolIE-ID ::= 366

id-AdditionalPrimaryRATRestriction ProtocolIE-ID ::= xxx

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