**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%22%20%5Cl%20%22_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_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 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-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. |
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| ***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). |
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| ***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: R3-240643Rev 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].

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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

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

--

-- 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 >>>>>>>>>>>>>>>>>>>