**3GPP TSG-RAN WG3 #123 *R3-240866***

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

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.423** | **CR** | **1202** | **rev** | **1** | **Current version:** | **18.0.0** |  |
|  |
| *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 |  |

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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:*** | **A** |  | ***Release:*** | Rel-18 |
|  | *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. |
|  |  |
| ***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. |
|  |  |
| ***Consequences if not approved:*** | The operator cannot restrict the access from NR to E-UTRA NTN. |
|  |  |
| ***Clauses affected:*** | 9.2.3.99, 9.3.5, 9.3.7 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **x** |  |  Other core specifications  | TS 36.413 CR 1924 TS 36.423 CR 1766 TS 38.413 CR 1109 |
| ***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: R3-240646Rev 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 >>>>>>>>>>>>>>>>>>>>

#### 9.2.3.99 Extended RAT Restriction Information

This element provides RAT restrictions as specified in TS 23.501 [7].

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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 >>>>>>>>>>>>>>>>>>>

### 9.3.5 Information Element definitions

-- ASN1START

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

--

-- 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

IMPORTS

 id-CNTypeRestrictionsForEquivalent,

 id-CNTypeRestrictionsForServing,

 id-Additional-UL-NG-U-TNLatUPF-List,

 id-ConfiguredTACIndication,

 id-AlternativeQoSParaSetList,

 id-CurrentQoSParaSetIndex,

 id-DefaultDRB-Allowed,

>>Unchanged Skipped<<

 id-CHO-CPAC-Info,

 id-CHO-Maxnoof-CondReconfig,

 id-PDUSetQoSParameters,

 id-N6JitterInformation,

 id-ECNMarkingorCongestionInformationReportingRequest,

 id-TAISliceUnavailableCellList,

 id-MobileIABCell,

id-AdditionalPrimaryRATRestriction,

 maxEARFCN,

 maxnoofAllowedAreas,

 maxnoofAMFRegions,

 maxnoofAoIs,

 maxnoofBPLMNs,

 maxnoofCAGs,

 maxnoofCAGsperPLMN,

>>Unchanged Skipped<<

Additional-UL-NG-U-TNLatUPF-Item ::= SEQUENCE {

 additional-UL-NG-U-TNLatUPF UPTransportLayerInformation,

 iE-Extensions ProtocolExtensionContainer { { Additional-UL-NG-U-TNLatUPF-Item-ExtIEs} } OPTIONAL,

 ...

}

Additional-UL-NG-U-TNLatUPF-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

 ...

}

Additional-UL-NG-U-TNLatUPF-List ::= SEQUENCE (SIZE(1..maxnoofMultiConnectivityMinusOne)) OF Additional-UL-NG-U-TNLatUPF-Item

Additional-Measurement-Timing-Configuration-List ::= SEQUENCE (SIZE(1.. maxnoofMTCItems)) OF Additional-Measurement-Timing-Configuration-Item

Additional-Measurement-Timing-Configuration-Item ::= SEQUENCE {

 additionalMeasurementTimingConfigurationIndex INTEGER (0..16),

 csi-RS-MTC-Configuration-List CSI-RS-MTC-Configuration-List,

 iE-Extensions ProtocolExtensionContainer { { Additional-Measurement-Timing-Configuration-Item-ExtIEs} } OPTIONAL,

 ...

}

Additional-Measurement-Timing-Configuration-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

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 XNAP-PROTOCOL-EXTENSION ::= {

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

 ...

}

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

### 9.3.7 Constant definitions

-- ASN1START

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--

-- Constant definitions

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

XnAP-Constants {

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

ngran-Access (22) modules (3) xnap (2) version1 (1) xnap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

 ProcedureCode,

 ProtocolIE-ID

FROM XnAP-CommonDataTypes;

>>Unchanged Skipped<<

id-ECNMarkingorCongestionInformationReportingRequest ProtocolIE-ID ::= 450

id-PDUSetbasedHandlingIndicator ProtocolIE-ID ::= 451

id-TAISliceUnavailableCellList ProtocolIE-ID ::= 452

id-MobileIAB-AuthorizationStatus ProtocolIE-ID ::= 453

id-MIAB-MT-BAP-Address ProtocolIE-ID ::= 454

id-MobileIABCell ProtocolIE-ID ::= 455

id-AdditionalPrimaryRATRestriction ProtocolIE-ID ::= xxx

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