**3GPP TSG-RAN WG3 Meeting # *R3-257309***

**Prague, Czech Republic, – 17 October, 2025**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **1559** | **rev** | **2** | **Current version:** |  |  |
|  |
| *For* [***HELP***](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:***  | Continuous MDT support |
|  |  |
| ***Source to WG:*** | Ericsson, Deutsche Telekom, FiberCop, Jio Platforms, InterDigital, BT, Orange, Verizon, ZTE |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** |  NR\_AIML\_NGRAN\_enh-Core |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** |  |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | SA5 has agreed to a Rel19 solution for Continuous Management-Based MDT. To enable continuity of measurement reporting during connected mode mobility and during UE context retrieval, the TR and TRSR used at a source NG-RAN node for a UE configured for Continuous Management-Based MDT need to be signalled to the target NG-RAN node. With this the target NG-RAN node is able to understand that the UE shall be configured for Continuous Management-Based MDT and it is able to assign the TRSR to the UE to create correlation of the reported Continuous Management-Based MDT measurements. |
|  |  |
| ***Summary of change:*** | Add a new IE including the TR and TRSR assigned to the UE by the source NG-RAN node in the XnAP Handover Request and in the UE Context Retrieve Response.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).This CR introduces the optional Continuous MDT IE in the Handover Request to enable Continuous Management Based MDT operation.This CR has limited impact with the previous version of the specification.There is limited ASN.1 impact. |
|  |  |
| ***Consequences if not approved:*** | Unable to support Continuous Management Based MDT procedures as agreed in SA5 |
|  |  |
| ***Clauses affected:*** | 8.2.1.2, 8.2.4.2, 9.1.1.1, 9.3.4 |
|  |  |
|  | **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:*** |  |

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

### 8.2.1 Handover Preparation

**-- TEXT OMITTED –**

8.2.1.2 Successful Operation

If the *Geographical Area* IE is included in the *MDT Configuration-NR* IE included in the HANDOVER REQUEST message, and the *Geographical Area* IE contains the *MDT PLMN List* IE, the target NG-RAN node shall, if supported, apply the geographical area scope only for UEs served in the listed PLMNs.

If the *Continuous MDT* IE is contained in the HANDOVER REQUEST message, the target NG-RAN node shall, if supported, take it into account to configure the UE with Continuous Management Based MDT.

**-- TEXT OMITTED –**

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

8.2.4 Retrieve UE Context

8.2.4.1 General

The purpose of the Retrieve UE Context procedure is to either retrieve the UE context from the old NG-RAN node and transfer it to the NG-RAN node where the UE RRC Connection has been requested to be established, or to enable the old NG-RAN node to forward an RRC message to the UE via the new NG-RAN node without context transfer, or to request for small data transmission. The procedure can also be used to transfer the authorization status information of the mobile IAB-node.

The procedure uses UE-associated signalling.

8.2.4.2 Successful Operation

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**Figure 8.2.4.2-1: Retrieve UE Context, successful operation**

The new NG-RAN node initiates the procedure by sending the RETRIEVE UE CONTEXT REQUEST message to the old NG-RAN node.

If the old NG-RAN node is able to identify the UE context by means of the UE Context ID, and to successfully verify the UE by means of the integrity protection contained in the RETRIEVE UE CONTEXT REQUEST message, and decides to provide the UE context to the new NG-RAN node, it shall respond to the new NG-RAN node with the RETRIEVE UE CONTEXT RESPONSE message.

If the *Trace Activation* IE is included in the RETRIEVE UE CONTEXT RESPONSE message, the new NG-RAN node shall, if supported, initiate the requested trace function as specified in TS 32.422 [23].

>>>>>>>>>>>>>>>>>>Unchanged parts are skipped<<<<<<<<<<<<<<<<<

If the *Management Based MDT PLMN List* IE is contained in the RETRIEVE UE CONTEXT RESPONSE message, the new NG-RAN node shall, if supported, store it in the UE context, and use this information to allow subsequent selection of the UE for management based MDT defined in TS 32.422 [23].

If the Continuous MDT IE is contained in the RETRIEVE UE CONTEXT RESPONSE message, the new NG-RAN node shall, if supported, take it into account to configure the UE with Continuous Management Based MDT.

If the *MBS Session Information List* IE is included in the *UE Context Information – Retrieve UE Context Response* IE contained in the RETRIEVE UE CONTEXT RESPONSE message, the new NG-RAN node shall, if supported, use this information to establish an NG-RAN MBS session resources context, if applicable.

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

#### 9.1.1.1 HANDOVER REQUEST

This message is sent by the source NG-RAN node to the target NG-RAN node to request the preparation of resources for a handover.

Direction: source NG-RAN node → target NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| Source NG-RAN node UE XnAP ID reference | M |  | NG-RAN node UE XnAP ID9.2.3.16 | Allocated at the source NG-RAN node | YES | reject |
| Cause | M |  | 9.2.3.2 |  | YES | reject |
| Target Cell Global ID | M |  | 9.2.3.25 | Includes either an E-UTRA CGI or an NR CGI | YES | reject |
| GUAMI | M |  | 9.2.3.24 |  | YES | reject |
| **UE Context Information** |  | *1* |  |  | YES | reject |
| >NG-C UE associated Signalling reference | M |  | AMF UE NGAP ID9.2.3.26 | Allocated at the AMF on the source NG-C connection. | – |  |
| >Signalling TNL association address at source NG-C side | M |  | CP Transport Layer Information9.2.3.31 | This IE indicates the AMF’s IP address of the SCTP association used at the source NG-C interface instance.NOTE: If no UE TNLA binding exists at the source NG-RAN node, the source NG-RAN node indicates the TNL association address it would have selected if it would have had to create a UE TNLA binding. | – |  |
| >UE Security Capabilities | M |  | 9.2.3.49 |  | – |  |
| >AS Security Information | M |  | 9.2.3.50 |  | – |  |
| >Index to RAT/Frequency Selection Priority | O |  | 9.2.3.23 |  | – |  |
| >UE Aggregate Maximum Bit Rate | M |  | 9.2.3.17 |  | – |  |
| >PDU Session Resources To Be Setup List |  | *1* | 9.2.1.1 | Similar to NG-C signalling, containing UL tunnel information per PDU Session Resource;and in addition, the source side QoS flow ⇔ DRB mapping | – |  |
| >RRC Context | M |  | OCTET STRING | Either includes the *HandoverPreparationInformation* message as defined in subclause 10.2.2. of TS 36.331 [14], or the *HandoverPreparationInformation-NB* message as defined in subclause 10.6.2 of TS 36.331 [14], if the target NG-RAN node is an ng-eNB,or the *HandoverPreparationInformation* message as defined in subclause 11.2.2 of TS 38.331 [10], if the target NG-RAN node is a gNB. | – |  |
| >Location Reporting Information | O |  | 9.2.3.47 | Includes the necessary parameters for location reporting. | – |  |
| >Mobility Restriction List | O |  | 9.2.3.53 |  | – |  |
| >5GC Mobility Restriction List Container | O |  | 9.2.3.100 |  | YES | ignore |
| >NR UE Sidelink Aggregate Maximum Bit Rate | O |  | 9.2.3.107 | This IE applies only if the UE is authorized for NR V2X services. | YES | ignore |
| >LTE UE Sidelink Aggregate Maximum Bit Rate | O |  | 9.2.3.108 | This IE applies only if the UE is authorized for LTE V2X services. | YES | ignore |
| >ManagementBasedMDT PLMN List | O |  | MDT PLMN List9.2.3.133 |  | YES | ignore |
| >UE Radio Capability ID | O |  | 9.2.3.138 |  | YES | reject |
| >MBS Session Information List | O |  | 9.2.1.36 |  | YES | ignore |
| >5G ProSe UE PC5 Aggregate Maximum Bit Rate | O |  | NR UE Sidelink Aggregate Maximum Bit Rate9.2.3.107 | This IE applies only if the UE is authorized for 5G ProSe services. | YES | ignore |
| >UE Slice Maximum Bit Rate List | O |  | 9.2.3.167 |  | YES | ignore |
| >NR A2X UE PC5 Aggregate Maximum Bit Rate | O |  | NR UE Sidelink Aggregate Maximum Bit Rate9.2.3.107 | This IE applies only if the UE is authorized for NR A2X services. | YES | ignore |
| >LTE A2X UE PC5 Aggregate Maximum Bit Rate | O |  | LTE UE Sidelink Aggregate Maximum Bit Rate9.2.3.108 | This IE applies only if the UE is authorized for LTE A2X services. | YES | ignore |
| Trace Activation | O |  | 9.2.3.55 |  | YES | ignore |
| Masked IMEISV | O |  | 9.2.3.32 |  | YES | ignore |
| UE History Information | M |  | 9.2.3.64 |  | YES | ignore |
| **UE Context Reference at the S-NG-RAN node** | O |  |  |  | YES | ignore |
| >Global NG-RAN Node ID | M |  | 9.2.2.3 |  | – |  |
| >S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID9.2.3.16 |  | – |  |
| **Conditional Handover Information Request** | O |  |  |  | YES | reject |
| >CHO Trigger | M |  | ENUMERATED (CHO-initiation, CHO-replace, …) |  | – |  |
| >Target NG-RAN node UE XnAP ID | C-ifCHOmod |  | NG-RAN node UE XnAP ID9.2.3.16 | Allocated at the target NG-RAN node | – |  |
| >Estimated Arrival Probability | O |  | INTEGER (1..100) |  | – |  |
| **>Conditional Handover Time Based Information** | O |  |  | This IE only applies to NTN. | YES | reject |
| >>Handover Window Start | M |  | INTEGER (0..549755813887) | Corresponds to information provided in the *t1-Threshold* contained in the *ReportConfigNR* IE as defined in TS 38.331 [10] | – |  |
| >>Handover Window Duration | M |  | INTEGER (1..6000) | Corresponds to information provided in the *duration* contained in the *condEventT1* contained in the *ReportConfigNR* IE as defined in TS 38.331 [10] | – |  |
| >Maximum Number of Conditional Reconfigurations to Prepare | O |  | INTEGER (1..8 , …) | Indicates that the target NG-RAN node may prepare for CHO with candidate PSCell(s) configuration and indicates the maximum number of conditional reconfigurations that the target NG-RAN node may prepare. | YES | reject |
| NR V2X Services Authorized | O |  | 9.2.3.105 |  | YES | ignore |
| LTE V2X Services Authorized | O |  | 9.2.3.106 |  | YES | ignore |
| PC5 QoS Parameters | O |  | 9.2.3.109 | This IE applies only if the UE is authorized for NR V2X services. | YES | ignore |
| Mobility Information | O |  | BIT STRING (SIZE (32)) | Information related to the handover; the source NG-RAN node provides it in order to enable later analysis of the conditions that led to a wrong HO. | YES | ignore |
| UE History Information from the UE | O |  | 9.2.3.110 |  | YES | ignore |
| IAB Node Indication | O |  | ENUMERATED (true, ...) |  | YES | reject |
| No PDU Session Indication | O |  | ENUMERATED (true, ...) | This IE applies only if the UE is an IAB-MT. | YES | ignore |
| Time Synchronisation Assistance Information  | O |  | 9.2.3.153 |  | YES | ignore |
| QMC Configuration Information | O |  | 9.2.3.156 |  | YES | ignore |
| 5G ProSe Authorized | O |  | 9.2.3.159 |  | YES | ignore |
| 5G ProSe PC5 QoS Parameters | O |  | 9.2.3.160 | This IE applies only if the UE is authorized for 5G ProSe services. | YES | ignore |
| IAB Authorization Status | O |  | ENUMERATED(authorized, not authorized, ...) | This IE indicates the authorization status of the IAB node. | YES | ignore |
| DL LBT Failure Information Request | O |  | ENUMERATED (inquiry, …) | This IE indicates that information on DL LBT Failures occurring at the target gNB that results in mobility failure is requested | YES | ignore |
| Aerial UE Subscription Information | O |  | 9.2.3.175 |  | YES | ignore |
| NR A2X Services Authorized | O |  | 9.2.3.176 |  | YES | ignore |
| LTE A2X Services Authorized | O |  | 9.2.3.177 |  | YES | ignore |
| A2X PC5 QoS Parameters | O |  | 9.2.3.178 | This IE applies only if the UE is authorized for NR A2X services. | YES | ignore |
| Cell Based UE Trajectory Prediction | O |  | 9.2.3.180 | This IE contains information about cells that a UE is predicted to be connected to. | YES | ignore |
| Data Collection ID | O |  | 9.2.3.184 |  | YES | ignore |
| Candidate Relay UE Info List | O |  | 9.2.3.188 |  | YES | reject |
| Source SN to Target SN QMC Information | O |  | QMC Configuration Information9.2.3.156 | This IE contains S-NG-RAN node-related QMC configuration information to be forwarded to the target S-NG-RAN node. | YES | ignore |
| Mobile IAB Authorization Status | O |  | 9.2.2.105 |  | YES | reject |
| Ranging and Sidelink Positioning Services Information | O |  | 9.2.3.208 | This IE applies only if the UE is authorized for NR V2X services and/or 5G ProSe services. | YES | ignore |
| **LTM Handover Information Request** | O |  |  |  | YES | reject |
| >Proposed LTM No Security Change ID List | O |  | LTM No Security Change ID List9.2.3.231 |  | – |  |
| >Target NG-RAN node UE XnAP ID | O |  | NG-RAN node UE XnAP ID9.2.3.16 | Allocated at the target NG-RAN node. | – |  |
| >Reference Configuration | O |  | OCTET STRING | Includes the *ltm-ReferenceConfiguration* as defined in TS 38.331 [10]. | – |  |
| >LTM Configuration ID Mapping List | O |  | 9.2.3.221 |  | – |  |
| >CSI Resource Configuration | O |  | 9.2.3.223 |  | – |  |
| >Request for CSI-RS Resource Configuration for L1 Measurements | O |  | ENUMERATED (true, …) |  | – |  |
| >Request for CSI-RS Resource Configuration for Early CSI Acquisition | O |  | ENUMERATED (true, …) |  | – |  |
| Early Sync Information Request | O |  | 9.2.3.217 |  | YES | ignore |
| Continuous MDT | O |  | 9.2.3.97 | This IE is used to indicate Continuous Management Based MDT operation | YES | ignore |

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| Condition | Explanation |
| ifCHOmod | This IE shall be present if the *CHO Trigger* IE is present and set to "CHO-replace". |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofMDTPLMNs | PLMNs in the Management Based MDT PLMN list. Value is 16. |

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

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

9.1.1.9 RETRIEVE UE CONTEXT RESPONSE

This message is sent by the old NG-RAN node to transfer the UE context to the new NG-RAN node.

Direction: old NG-RAN node → new NG-RAN node.

| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| New NG-RAN node UE XnAP ID reference | M |  | NG-RAN node UE XnAP ID9.2.3.16 | Allocated at the new NG-RAN node | YES | ignore |
| Old NG-RAN node UE XnAP ID reference | M |  | NG-RAN node UE XnAP ID9.2.3.16 | Allocated at the old NG-RAN node | YES | ignore |
| GUAMI | M |  | 9.2.3.24 |  | YES | reject |
| UE Context Information – Retrieve UE Context Response | M |  | 9.2.1.13 |  | YES | reject |
| Trace Activation | O |  | 9.2.3.55 |  | YES | ignore |
| Masked IMEISV | O |  | 9.2.3.32 |  | YES | ignore |
| Location Reporting Information | O |  | 9.2.3.47 | Includes the necessary parameters for location reporting. | YES | ignore |
| Criticality Diagnostics | O |  | 9.2.3.3 |  | YES | ignore |
| NR V2X Services Authorized | O |  | 9.2.3.105 |  | YES | ignore |
| LTE V2X Services Authorized | O |  | 9.2.3.106 |  | YES | ignore |
| PC5 QoS Parameters | O |  | 9.2.3.109 | This IE applies only if the UE is authorized for NR V2X services. | YES | ignore |
| UE History Information | O |  | 9.2.3.64 |  | YES | ignore |
| UE History Information from the UE | O |  | 9.2.3.110 |  | YES | ignore |
| ManagementBasedMDT PLMN List | O |  | MDT PLMN List9.2.3.133 |  | YES | ignore |
| Continuous MDT | O |  | 9.2.3.97 | This IE is used to indicate Continuous Management Based MDT operation | YES | ignore |
| IAB Node Indication | O |  | ENUMERATED (true, ...) |  | YES | reject |
| **UE Context Reference at the S-NG-RAN node** | O |  |  |  | YES | ignore |
| >Global NG-RAN Node ID | M |  | 9.2.2.3 |  | – |  |
| >S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID9.2.3.16 |  | – |  |
| Time Synchronisation Assistance Information  | O |  | 9.2.3.153 |  | YES | ignore |
| QMC Configuration Information | O |  | 9.2.3.156 |  | YES | ignore |
| 5G ProSe Authorized | O |  | 9.2.3.159 |  | YES | ignore |
| 5G ProSe PC5 QoS Parameters | O |  | 9.2.3.160 | This IE applies only if the UE is authorized for 5G ProSe services. | YES | ignore |
| Aerial UE Subscription Information | O |  | 9.2.3.175 |  | YES | ignore |
| NR A2X Services Authorized | O |  | 9.2.3.176 |  | YES | ignore |
| LTE A2X Services Authorized | O |  | 9.2.3.177 |  | YES | ignore |
| A2X PC5 QoS Parameters | O |  | 9.2.3.178 | This IE applies only if the UE is authorized for NR A2X services. | YES | ignore |
| Mobile IAB Authorization Status | O |  | 9.2.2.105 |  | YES | reject |
| Ranging and Sidelink Positioning Services Information | O |  | 9.2.3.208 | This IE applies only if the UE is authorized for NR V2X services and/or 5G ProSe services. | YES | ignore |

|  |  |
| --- | --- |
| **Range bound** | **Explanation** |
| maxnoofMDTPLMNs | PLMNs in the Management Based MDT PLMN list. Value is 16. |

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

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9.3.4 PDU Definitions

-- ASN1START

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

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-- PDU definitions for XnAP.

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

XnAP-PDU-Contents {

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

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

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-- IE parameter types from other modules.

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

IMPORTS

 ActivationIDforCellActivation,

 AMF-Region-Information,

 AMF-UE-NGAP-ID,

 AS-SecurityInformation,

 AssistanceDataForRANPaging,

 AerialUESubscriptionInformation,

 A2XPC5QoSParameters,

 BitRate,

 Cause,

 CellAndCapacityAssistanceInfo-EUTRA,

 CellAndCapacityAssistanceInfo-NR,

 CellAssistanceInfo-EUTRA,

 CellAssistanceInfo-NR,

 CHOinformation-Req,

 CHOinformation-Ack,

 CHOinformation-AddReq,

 CHOinformation-AddReqAck,

 CHOinformation-ModReq,

 CHO-MRDC-EarlyDataForwarding,

 CHO-MRDC-Indicator,

 CPTransportLayerInformation,

 TNLA-To-Add-List,

 TNLA-To-Update-List,

 TNLA-To-Remove-List,

 TNLA-Setup-List,

 TNLA-Failed-To-Setup-List,

 CriticalityDiagnostics,

 XnUAddressInfoperPDUSession-List,

 DAPSResponseInfo-List,

 DataTrafficResourceIndication,

 DeliveryStatus,

 DesiredActNotificationLevel,

 DRB-ID,

 DRB-List,

 DRB-Number,

 DRBsSubjectToDLDiscarding-List,

 DRBsSubjectToEarlyStatusTransfer-List,

 DRBsSubjectToStatusTransfer-List,

 DRBToQoSFlowMapping-List,

 E-UTRA-CGI,

 ExpectedUEActivityBehaviour,

 ExpectedUEBehaviour,

 ExtendedUEIdentityIndexValue,

 FiveGCMobilityRestrictionListContainer,

 GlobalCell-ID,

 GlobalNG-RANNode-ID,

 GlobalNG-RANCell-ID,

 GUAMI,

 InterfaceInstanceIndication,

 I-RNTI,

 Local-NG-RAN-Node-Identifier,

 LocationInformationSNReporting,

 LocationReportingInformation,

 LowerLayerPresenceStatusChange,

 LTEA2XServicesAuthorized,

 LTEUESidelinkAggregateMaximumBitRate,

 LTEV2XServicesAuthorized,

 MR-DC-ResourceCoordinationInfo,

 ServedCells-E-UTRA,

 ServedCells-NR,

 ServedCellsToUpdate-E-UTRA,

 ServedCellsToUpdate-NR,

 MAC-I,

 MaskedIMEISV,

 MDT-Configuration,

 MDTPLMNList,

 MobilityRestrictionList,

 Neighbour-NG-RAN-Node-List,

 NG-RAN-Cell-Identity,

 NG-RANnodeUEXnAPID,

 NR-CGI,

 NE-DC-TDM-Pattern,

 NRA2XServicesAuthorized,

 NRUESidelinkAggregateMaximumBitRate,

 NRV2XServicesAuthorized,

 PagingDRX,

 EUTRAPagingeDRXInformation,

 PagingPriority,

 PartialListIndicator,

 PLMN-Identity,

 PDCPChangeIndication,

 PDUSessionAggregateMaximumBitRate,

 PDUSession-ID,

 PDUSession-List,

 PDUSession-List-withCause,

 PDUSession-List-withDataForwardingFromTarget,

 PDUSession-List-withDataForwardingRequest,

 PDUSessionResourcesAdmitted-List,

 PDUSessionResourcesNotAdmitted-List,

 PDUSessionResourcesToBeSetup-List,

 PDUSessionResourceChangeRequiredInfo-SNterminated,

 PDUSessionResourceChangeRequiredInfo-MNterminated,

 PDUSessionResourceChangeConfirmInfo-SNterminated,

 PDUSessionResourceChangeConfirmInfo-MNterminated,

 PDUSessionResourceSecondaryRATUsageList,

 PDUSessionResourceSetupInfo-SNterminated,

 PDUSessionResourceSetupInfo-MNterminated,

 PDUSessionResourceSetupResponseInfo-SNterminated,

 PDUSessionResourceSetupResponseInfo-MNterminated,

 PDUSessionResourceModificationInfo-SNterminated,

 PDUSessionResourceModificationInfo-MNterminated,

 PDUSessionResourceModificationResponseInfo-SNterminated,

 PDUSessionResourceModificationResponseInfo-MNterminated,

 PDUSessionResourceModConfirmInfo-SNterminated,

 PDUSessionResourceModConfirmInfo-MNterminated,

 PDUSessionResourceModRqdInfo-SNterminated,

 PDUSessionResourceModRqdInfo-MNterminated,

 PDUSessionType,

 PC5QoSParameters,

 QoSFlowIdentifier,

 QoSFlowNotificationControlIndicationInfo,

 QoSFlows-List,

 RANPagingArea,

 ResetRequestTypeInfo,

 ResetResponseTypeInfo,

 RFSP-Index,

 RRCConfigIndication,

 RRCResumeCause,

 SCGConfigurationQuery,

 SCGreconfigNotification,

 SecurityIndication,

 S-NG-RANnode-SecurityKey,

 SpectrumSharingGroupID,

 SplitSRBsTypes,

 S-NG-RANnode-Addition-Trigger-Ind,

 S-NSSAI,

 TargetCellList,

 TAISupport-List,

 Target-CGI,

 TimeToWait,

 TraceActivation,

 UEAggregateMaximumBitRate,

 UEContextID,

 UEContextInfoRetrUECtxtResp,

 UEContextKeptIndicator,

 UEHistoryInformation,

 UEIdentityIndexValue,

 UERadioCapabilityForPaging,

 UERadioCapabilityID,

 UERANPagingIdentity,

 UESecurityCapabilities,

 UPTransportLayerInformation,

 UserPlaneTrafficActivityReport,

 XnBenefitValue,

 RANPagingFailure,

 TNLConfigurationInfo,

 MaximumCellListSize,

 MessageOversizeNotification,

 NG-RANTraceID,

 MobilityInformation,

 InitiatingCondition-FailureIndication,

 HandoverReportType,

 TargetCellinEUTRAN,

 C-RNTI,

 UERLFReportContainer,

 Measurement-ID,

 RegistrationRequest,

 ReportCharacteristics,

 CellToReport,

 ReportingPeriodicity,

 CellMeasurementResult,

 UEHistoryInformationFromTheUE,

 MobilityParametersInformation,

 MobilityParametersModificationRange,

 RAReport,

 IABNodeIndication,

 SNTriggered,

 SCGIndicator,

 UESpecificDRX,

 DirectForwardingPathAvailability,

 TransportLayerAddress,

 PrivacyIndicator,

 URIaddress,

 MBS-Session-ID,

 UEIdentityIndexList-MBSGroupPaging,

 MBS-SessionInformation-List,

 MBS-SessionInformationResponse-List,

 SuccessfulHOReportInformation,

 PSCellHistoryInformationRetrieve,

 SSBOffsets-List,

 NG-RANnode2SSBOffsetsModificationRange,

 Coverage-Modification-List,

 SCGFailureReportContainer,

 SNMobilityInformation,

 PSCellChangeHistory,

 CHOConfiguration,

 SCGUEHistoryInformation,

 F1CTrafficContainer,

 NoPDUSessionIndication,

 IAB-TNL-Address-Request,

 IAB-TNL-Address-Response,

 TrafficIndex,

 TrafficProfile,

 TrafficToBeReleaseInformation,

 F1-TerminatingTopologyBHInformation,

 Non-F1-TerminatingTopologyBHInformation,

 BHInfoList,

 IABTNLAddress,

 IABCellInformation,

 IABTNLAddressException,

 TimeSynchronizationAssistanceInformation,

 SCGActivationRequest,

 SCGActivationStatus,

 CPAInformationRequest,

 CPAInformationAck,

 CPCInformationRequired,

 CPCInformationConfirm,

 CPAInformationModReq,

 CPAInformationModReqAck,

 CPC-DataForwarding-Indicator,

 CPCInformationUpdate,

 CPACInformationModRequired,

 QMCConfigInfo,

 FiveGProSeAuthorized,

 FiveGProSePC5QoSParameters,

 ServedCellSpecificInfoReq-NR,

 NRPagingeDRXInformation,

 NRPagingeDRXInformationforRRCINACTIVE,

 SDTSupportRequest,

 SDT-Termination-Request,

 SDTPartialUEContextInfo,

 SDTDataForwardingDRBList,

 PEIPSassistanceInformation,

 UESliceMaximumBitRateList,

 PagingCause,

 MDTPLMNModificationList,

 F1-terminatingIAB-donorIndicator,

 SRB-ID,

 AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated,

 HashedUEIdentityIndexValue,

 MBS-DataForwarding-Indicator,

 IABAuthorizationStatus,

 NID,

 MT-SDT-Information,

 PosPartialUEContextInfo,

 SRSConfiguration,

 RaReportIndicationList,

 SuccessfulPSCellChangeReportInformation,

 CPACConfiguration,

 TimeSinceFailure,

 SPRAvailability,

 DLLBTFailureInformationRequest,

 DLLBTFailureInformationList,

 CellBasedUETrajectoryPrediction,

 DataCollectionID,

 RequestedPredictionTime,

 NodeMeasurementInitiationResult-List,

 CellMeasurementInitiationResult-List,

 UEAssociatedInfoResult-List,

 UETrajectoryCollectionConfiguration,

 UEPerformanceCollectionConfiguration,

 CellMeasurementResultForDataCollection-List,

 CellToReportForDataCollection-List,

 CandidateRelayUEInfoList,

 NRPagingLongeDRXInformationforRRCINACTIVE,

 QMCCoordinationRequest,

 QMCCoordinationResponse,

 DirectForwardingPathAvailabilityWithSourceMN,

 Conditional-Reconfig-List,

 PDUSetbasedHandlingIndicator,

 MobileIAB-AuthorizationStatus,

 BAPAddress,

 S-CPAC-Request,

 SK-COUNTER,

 RegistrationRequestForDataCollection,

 ReportCharacteristicsForDataCollection,

 ReportingPeriodicityForDataCollection,

 NodeAssociatedInfoResult,

 SLPositioning-Ranging-Services-Info,

 PDUSessionsListToBeReleased-UPError,

 UserPlaneFailureIndication,

 SRSPositioningConfigOrActivationRequest,

 NRPPaPositioningInformation,

 ContinuousMDT

FROM XnAP-IEs

 PrivateIE-Container{},

 ProtocolExtensionContainer{},

 ProtocolIE-Container{},

 ProtocolIE-ContainerList{},

 ProtocolIE-ContainerPair{},

 ProtocolIE-ContainerPairList{},

 ProtocolIE-Single-Container{},

 XNAP-PRIVATE-IES,

 XNAP-PROTOCOL-EXTENSION,

 XNAP-PROTOCOL-IES,

 XNAP-PROTOCOL-IES-PAIR

FROM XnAP-Containers

 id-A2XPC5QoSParameters,

 id-ActivatedServedCells,

 id-ActivationIDforCellActivation,

 id-AdditionalDRBIDs,

 id-AerialUESubscriptionInformation,

 id-AMF-Region-Information,

 id-AMF-Region-Information-To-Add,

 id-AMF-Region-Information-To-Delete,

 id-AssistanceDataForRANPaging,

 id-AvailableDRBIDs,

 id-Cause,

 id-cellAssistanceInfo-EUTRA,

 id-cellAssistanceInfo-NR,

 id-CellAndCapacityAssistanceInfo-EUTRA,

 id-CellAndCapacityAssistanceInfo-NR,

 id-ConfigurationUpdateInitiatingNodeChoice,

 id-UEContextID,

 id-CriticalityDiagnostics,

 id-XnUAddressInfoperPDUSession-List,

 id-DesiredActNotificationLevel,

 id-DRBsSubjectToStatusTransfer-List,

 id-ExpectedUEBehaviour,

 id-ExtendedUEIdentityIndexValue,

 id-FiveGCMobilityRestrictionListContainer,

 id-GlobalNG-RAN-node-ID,

 id-GUAMI,

 id-indexToRatFrequSelectionPriority,

 id-List-of-served-cells-E-UTRA,

 id-List-of-served-cells-NR,

 id-LocationInformationSN,

 id-LocationInformationSNReporting,

 id-LocationReportingInformation,

 id-LTEA2XServicesAuthorized,

 id-LTEA2XUEPC5AggregateMaximumBitRate,

 id-LTEUESidelinkAggregateMaximumBitRate,

 id-LTEV2XServicesAuthorized,

 id-MAC-I,

 id-MaskedIMEISV,

 id-MDT-Configuration,

 id-MDTPLMNList,

 id-MN-to-SN-Container,

 id-MobilityRestrictionList,

 id-M-NG-RANnodeUEXnAPID,

 id-new-NG-RAN-Cell-Identity,

 id-newNG-RANnodeUEXnAPID,

 id-NRA2XServicesAuthorized,

 id-NRA2XUEPC5AggregateMaximumBitRate,

 id-NRUESidelinkAggregateMaximumBitRate,

 id-NRV2XServicesAuthorized,

 id-oldNG-RANnodeUEXnAPID,

 id-OldtoNewNG-RANnodeResumeContainer,

 id-PagingCause,

 id-PagingDRX,

 id-EUTRAPagingeDRXInformation,

 id-PagingPriority,

 id-PartialListIndicator-EUTRA,

 id-PartialListIndicator-NR,

 id-PCellID,

 id-PDUSessionResourceSecondaryRATUsageList,

 id-PDUSessionResourcesActivityNotifyList,

 id-PDUSessionResourcesAdmitted-List,

 id-PDUSessionResourcesNotAdmitted-List,

 id-PDUSessionResourcesNotifyList,

 id-PDUSessionToBeAddedAddReq,

 id-PDUSessionToBeReleased-RelReqAck,

 id-procedureStage,

 id-RANPagingArea,

 id-requestedSplitSRB,

 id-RequiredNumberOfDRBIDs,

 id-ResetRequestTypeInfo,

 id-ResetResponseTypeInfo,

 id-RespondingNodeTypeConfigUpdateAck,

 id-RRCResumeCause,

 id-SCGreconfigNotification,

 id-selectedPLMN,

 id-ServedCellsToActivate,

 id-servedCellsToUpdate-E-UTRA,

 id-ServedCellsToUpdateInitiatingNodeChoice,

 id-servedCellsToUpdate-NR,

 id-sourceNG-RANnodeUEXnAPID,

 id-SpareDRBIDs,

 id-S-NG-RANnodeMaxIPDataRate-UL,

 id-S-NG-RANnodeMaxIPDataRate-DL,

 id-S-NG-RANnodeUEXnAPID,

 id-TAISupport-list,

 id-Target2SourceNG-RANnodeTranspContainer,

 id-targetCellGlobalID,

 id-targetNG-RANnodeUEXnAPID,

 id-TimeToWait,

 id-TNLA-To-Add-List,

 id-TNLA-To-Update-List,

 id-TNLA-To-Remove-List,

 id-TNLA-Setup-List,

 id-TNLA-Failed-To-Setup-List,

 id-TraceActivation,

 id-UEContextInfoHORequest,

 id-UEContextInfoRetrUECtxtResp,

 id-UEContextKeptIndicator,

 id-UEContextRefAtSN-HORequest,

 id-UEHistoryInformation,

 id-UEIdentityIndexValue,

 id-UERANPagingIdentity,

 id-UESecurityCapabilities,

 id-UserPlaneTrafficActivityReport,

 id-XnRemovalThreshold,

 id-PDUSessionAdmittedAddedAddReqAck,

 id-PDUSessionNotAdmittedAddReqAck,

 id-SN-to-MN-Container,

 id-RRCConfigIndication,

 id-SplitSRB-RRCTransfer,

 id-UEReportRRCTransfer,

 id-PDUSessionReleasedList-RelConf,

 id-BearersSubjectToCounterCheck,

 id-PDUSessionToBeReleasedList-RelRqd,

 id-ResponseInfo-ReconfCompl,

 id-initiatingNodeType-ResourceCoordRequest,

 id-respondingNodeType-ResourceCoordResponse,

 id-PDUSessionToBeReleased-RelReq,

 id-PDUSession-SNChangeRequired-List,

 id-PDUSession-SNChangeConfirm-List,

 id-PDCPChangeIndication,

 id-PC5QoSParameters,

 id-SCGConfigurationQuery,

 id-UEContextInfo-SNModRequest,

 id-requestedSplitSRBrelease,

 id-PDUSessionAdmitted-SNModResponse,

 id-PDUSessionNotAdmitted-SNModResponse,

 id-admittedSplitSRB,

 id-admittedSplitSRBrelease,

 id-PDUSessionAdmittedModSNModConfirm,

 id-PDUSessionReleasedSNModConfirm,

 id-s-ng-RANnode-SecurityKey,

 id-PDUSessionToBeModifiedSNModRequired,

 id-S-NG-RANnodeUE-AMBR,

 id-PDUSessionToBeReleasedSNModRequired,

 id-target-S-NG-RANnodeID,

 id-S-NSSAI,

 id-MR-DC-ResourceCoordinationInfo,

 id-RANPagingFailure,

 id-UERadioCapabilityForPaging,

 id-PDUSessionDataForwarding-SNModResponse,

 id-Secondary-MN-Xn-U-TNLInfoatM,

 id-NE-DC-TDM-Pattern,

 id-InterfaceInstanceIndication,

 id-S-NG-RANnode-Addition-Trigger-Ind,

 id-SNTriggered,

 id-DRBs-transferred-to-MN,

 id-TNLConfigurationInfo,

 id-MessageOversizeNotification,

 id-NG-RANTraceID,

 id-FastMCGRecoveryRRCTransfer-SN-to-MN,

 id-FastMCGRecoveryRRCTransfer-MN-to-SN,

 id-RequestedFastMCGRecoveryViaSRB3,

 id-AvailableFastMCGRecoveryViaSRB3,

 id-RequestedFastMCGRecoveryViaSRB3Release,

 id-ReleaseFastMCGRecoveryViaSRB3,

 id-CHOinformation-Req,

 id-CHOinformation-Ack,

 id-targetCellsToCancel,

 id-requestedTargetCellGlobalID,

 id-DAPSResponseInfo-List,

 id-CHO-MRDC-EarlyDataForwarding,

 id-CHO-MRDC-Indicator,

 id-MobilityInformation,

 id-InitiatingCondition-FailureIndication,

 id-UEHistoryInformationFromTheUE,

 id-HandoverReportType,

 id-HandoverCause,

 id-SourceCellCGI,

 id-TargetCellCGI,

 id-ReEstablishmentCellCGI,

 id-TargetCellinEUTRAN,

 id-SourceCellCRNTI,

 id-UERLFReportContainer,

 id-NGRAN-Node1-Measurement-ID,

 id-NGRAN-Node2-Measurement-ID,

 id-RegistrationRequest,

 id-ReportCharacteristics,

 id-CellToReport,

 id-ReportingPeriodicity,

 id-CellMeasurementResult,

 id-NG-RANnode1CellID,

 id-NG-RANnode2CellID,

 id-NG-RANnode1MobilityParameters,

 id-NG-RANnode2ProposedMobilityParameters,

 id-MobilityParametersModificationRange,

 id-RAReport,

 id-IABNodeIndication,

 id-UERadioCapabilityID,

 id-SCGIndicator,

 id-UESpecificDRX,

 id-PDUSessionExpectedUEActivityBehaviour,

 id-DirectForwardingPathAvailability,

 id-SourceNG-RAN-node-ID,

 id-TargetNodeID,

 id-ManagementBasedMDTPLMNList,

 id-PrivacyIndicator,

 id-TraceCollectionEntityIPAddress,

 id-TraceCollectionEntityURI,

 id-MBS-Session-ID,

 id-UEIdentityIndexList-MBSGroupPaging,

 id-MulticastRANPagingArea,

 id-MBS-SessionInformation-List,

 id-MBS-SessionInformationResponse-List,

 id-SuccessfulHOReportInformation,

 id-PSCellHistoryInformationRetrieve,

 id-SSBOffsets-List,

 id-NG-RANnode2SSBOffsetsModificationRange,

 id-Coverage-Modification-List,

 id-SourcePSCellCGI,

 id-FailedPSCellCGI,

 id-SCGFailureReportContainer,

 id-SNMobilityInformation,

 id-SourcePSCellID,

 id-SuitablePSCellCGI,

 id-PSCellChangeHistory,

 id-CHOConfiguration,

 id-SCGUEHistoryInformation,

 id-F1CTrafficContainer,

 id-NoPDUSessionIndication,

 id-F1-Terminating-IAB-DonorUEXnAPID,

 id-nonF1-Terminating-IAB-DonorUEXnAPID,

 id-IAB-TNL-Address-Request,

 id-IAB-TNL-Address-Response,

 id-TrafficToBeAddedList,

 id-TrafficToBeModifiedList,

 id-TrafficToBeReleaseInformation,

 id-TrafficAddedList,

 id-TrafficModifiedList,

 id-TrafficNotAddedList,

 id-TrafficNotModifiedList,

 id-TrafficRequiredToBeModifiedList,

 id-TrafficRequiredModifiedList,

 id-TrafficReleasedList,

 id-IABTNLAddressToBeAdded,

 id-IABTNLAddressToBeReleasedList,

 id-BoundaryNodeCellsList,

 id-ParentNodeCellsList,

 id-IABTNLAddressException,

 id-CHOinformation-AddReq,

 id-CHOinformation-AddReqAck,

 id-CHOinformation-ModReq,

 id-TimeSynchronizationAssistanceInformation,

 id-SCGActivationRequest,

 id-SCGActivationStatus,

 id-CPAInformationRequest,

 id-CPAInformationAck,

 id-CPCInformationRequired,

 id-CPCInformationConfirm,

 id-CPAInformationModReq,

 id-CPAInformationModReqAck,

 id-CPC-DataForwarding-Indicator,

 id-CPCInformationUpdate,

 id-CPACInformationModRequired,

 id-QMCConfigInfo,

 id-Local-NG-RAN-Node-Identifier,

 id-Neighbour-NG-RAN-Node-List,

 id-Local-NG-RAN-Node-Identifier-Removal,

 id-FiveGProSeAuthorized,

 id-FiveGProSePC5QoSParameters,

 id-FiveGProSeUEPC5AggregateMaximumBitRate,

 id-ServedCellSpecificInfoReq-NR,

 id-NRPagingeDRXInformation,

 id-NRPagingeDRXInformationforRRCINACTIVE,

 id-SDTSupportRequest,

 id-SDT-SRB-between-NewNode-OldNode,

 id-SDT-Termination-Request,

 id-SDTPartialUEContextInfo,

 id-SDTDataForwardingDRBList,

 id-PEIPSassistanceInformation,

 id-UESliceMaximumBitRateList,

 id-S-NG-RANnodeUE-Slice-MBR,

 id-ManagementBasedMDTPLMNModificationList,

 id-F1-terminatingIAB-donorIndicator,

 id-AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated,

 id-HashedUEIdentityIndexValue,

 id-MBS-DataForwarding-Indicator,

 id-IABAuthorizationStatus,

 id-SelectedNID,

 id-MT-SDT-Information,

 id-PosPartialUEContextInfo,

 id-SRSConfiguration,

 id-RaReportIndicationList,

 id-SuccessfulPSCellChangeReportInformation,

 id-CPACConfiguration,

 id-TargetCellCRNTI,

 id-TimeSinceFailure,

 id-SPRAvailability,

 id-DLLBTFailureInformationRequest,

 id-DLLBTFailureInformationList,

 id-CellBasedUETrajectoryPrediction,

 id-DataCollectionID,

 id-RequestedPredictionTime,

 id-NodeMeasurementInitiationResult-List,

 id-CellMeasurementInitiationResult-List,

 id-UEAssociatedInfoResult-List,

 id-UETrajectoryCollectionConfiguration,

 id-UEPerformanceCollectionConfiguration,

 id-CellMeasurementResultForDataCollection-List,

 id-CellToReportForDataCollection-List,

 id-CandidateRelayUEInfoList,

 id-NRCellsAndSSBsList,

 id-ActivatedNRCellsAndSSBsList,

 id-NRPagingLongeDRXInformationforRRCINACTIVE,

 id-QMCCoordinationRequest,

 id-QMCCoordinationResponse,

 id-QoE-Measurement-Results,

 id-Src-SN-to-Tgt-SNQMCInfoInquiry,

 id-DirectForwardingPathAvailabilityWithSourceMN,

 id-accessed-PSCellID,

 id-conditional-Reconfig-ToCancel-List,

 id-PDUSetbasedHandlingIndicator,

 id-MobileIAB-AuthorizationStatus,

 id-MIAB-MT-BAP-Address,

 id-S-CPAC-Request,

 id-sk-Counter,

 id-Source-M-NG-RANnodeID,

 id-SourceSN-to-TargetSN-QMCInfo,

 id-RegistrationRequestForDataCollection,

 id-ReportCharacteristicsForDataCollection,

 id-ReportingPeriodicityForDataCollection,

 id-NodeAssociatedInfoResult,

 id-SLPositioning-Ranging-Services-Info,

 id-PDUSessionsListToBeReleased-UPError,

 id-UserPlaneFailureIndication,

 id-SRSPositioningConfigOrActivationRequest,

 id-NRPPaPositioningInformation,

 id-ContinuousMDT

 maxnoofCellsinNG-RANnode,

 maxnoofDRBs,

 maxnoofPDUSessions,

 maxnoofQoSFlows,

 maxnoofServedCellsIAB,

 maxnoofTrafficIndexEntries,

 maxnoofTLAsIAB,

 maxnoofBAPControlPDURLCCHs,

 maxnoofServingCells,

 maxnoofSSBAreas

FROM XnAP-Constants;

**-- TEXT OMITTED –**

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--

-- HANDOVER REQUEST

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

HandoverRequest ::= SEQUENCE {

 protocolIEs ProtocolIE-Container {{HandoverRequest-IEs}},

 ...

}

HandoverRequest-IEs XNAP-PROTOCOL-IES ::= {

 { ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

 { ID id-Cause CRITICALITY reject TYPE Cause PRESENCE mandatory}|

 { ID id-targetCellGlobalID CRITICALITY reject TYPE Target-CGI PRESENCE mandatory}|

 { ID id-GUAMI CRITICALITY reject TYPE GUAMI PRESENCE mandatory}|

 { ID id-UEContextInfoHORequest CRITICALITY reject TYPE UEContextInfoHORequest PRESENCE mandatory}|

 { ID id-TraceActivation CRITICALITY ignore TYPE TraceActivation PRESENCE optional }|

 { ID id-MaskedIMEISV CRITICALITY ignore TYPE MaskedIMEISV PRESENCE optional }|

 { ID id-UEHistoryInformation CRITICALITY ignore TYPE UEHistoryInformation PRESENCE mandatory}|

 { ID id-UEContextRefAtSN-HORequest CRITICALITY ignore TYPE UEContextRefAtSN-HORequest PRESENCE optional }|

 { ID id-CHOinformation-Req CRITICALITY reject TYPE CHOinformation-Req PRESENCE optional }|

 { ID id-NRV2XServicesAuthorized CRITICALITY ignore TYPE NRV2XServicesAuthorized PRESENCE optional }|

 { ID id-LTEV2XServicesAuthorized CRITICALITY ignore TYPE LTEV2XServicesAuthorized PRESENCE optional }|

 { ID id-PC5QoSParameters CRITICALITY ignore TYPE PC5QoSParameters PRESENCE optional }|

 { ID id-MobilityInformation CRITICALITY ignore TYPE MobilityInformation PRESENCE optional }|

 { ID id-UEHistoryInformationFromTheUE CRITICALITY ignore TYPE UEHistoryInformationFromTheUE PRESENCE optional }|

 { ID id-IABNodeIndication CRITICALITY reject TYPE IABNodeIndication PRESENCE optional }|

 { ID id-NoPDUSessionIndication CRITICALITY ignore TYPE NoPDUSessionIndication PRESENCE optional }|

 { ID id-TimeSynchronizationAssistanceInformation CRITICALITY ignore TYPE TimeSynchronizationAssistanceInformation PRESENCE optional }|

 { ID id-QMCConfigInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

 { ID id-FiveGProSeAuthorized CRITICALITY ignore TYPE FiveGProSeAuthorized PRESENCE optional }|

 { ID id-FiveGProSePC5QoSParameters CRITICALITY ignore TYPE FiveGProSePC5QoSParameters PRESENCE optional }|

 { ID id-IABAuthorizationStatus CRITICALITY ignore TYPE IABAuthorizationStatus PRESENCE optional }|

 { ID id-DLLBTFailureInformationRequest CRITICALITY ignore TYPE DLLBTFailureInformationRequest PRESENCE optional }|

 { ID id-AerialUESubscriptionInformation CRITICALITY ignore TYPE AerialUESubscriptionInformation PRESENCE optional }|

 { ID id-NRA2XServicesAuthorized CRITICALITY ignore TYPE NRA2XServicesAuthorized PRESENCE optional }|

 { ID id-LTEA2XServicesAuthorized CRITICALITY ignore TYPE LTEA2XServicesAuthorized PRESENCE optional }|

 { ID id-A2XPC5QoSParameters CRITICALITY ignore TYPE A2XPC5QoSParameters PRESENCE optional }|

 { ID id-CellBasedUETrajectoryPrediction CRITICALITY ignore TYPE CellBasedUETrajectoryPrediction PRESENCE optional }|

 { ID id-DataCollectionID CRITICALITY ignore TYPE DataCollectionID PRESENCE optional }|

 { ID id-CandidateRelayUEInfoList CRITICALITY reject TYPE CandidateRelayUEInfoList PRESENCE optional }|

 { ID id-SourceSN-to-TargetSN-QMCInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

 { ID id-MobileIAB-AuthorizationStatus CRITICALITY reject TYPE MobileIAB-AuthorizationStatus PRESENCE optional }|

 { ID id-SLPositioning-Ranging-Services-Info CRITICALITY ignore TYPE SLPositioning-Ranging-Services-Info PRESENCE optional }|

 { ID id-LTMHandoverInformationRequest CRITICALITY reject TYPE LTMHandoverInformationRequest PRESENCE optional}|

 { ID id-EarlySyncInformationRequest CRITICALITY ignore TYPE EarlySyncInformationRequest PRESENCE optional}|

 { ID id-ContinuousMDT CRITICALITY ignore TYPE NG-RANTraceID PRESENCE optional },

 ...

}

UEContextInfoHORequest ::= SEQUENCE {

 ng-c-UE-reference AMF-UE-NGAP-ID,

 cp-TNL-info-source CPTransportLayerInformation,

 ueSecurityCapabilities UESecurityCapabilities,

 securityInformation AS-SecurityInformation,

 indexToRatFrequencySelectionPriority RFSP-Index OPTIONAL,

 ue-AMBR UEAggregateMaximumBitRate,

 pduSessionResourcesToBeSetup-List PDUSessionResourcesToBeSetup-List,

 rrc-Context OCTET STRING,

 locationReportingInformation LocationReportingInformation OPTIONAL,

 mrl MobilityRestrictionList OPTIONAL,

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

 ...

}

UEContextInfoHORequest-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 { ID id-FiveGCMobilityRestrictionListContainer CRITICALITY ignore EXTENSION FiveGCMobilityRestrictionListContainer PRESENCE optional }|

 { ID id-NRUESidelinkAggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

 { ID id-LTEUESidelinkAggregateMaximumBitRate CRITICALITY ignore EXTENSION LTEUESidelinkAggregateMaximumBitRate PRESENCE optional }|

 { ID id-MDTPLMNList CRITICALITY ignore EXTENSION MDTPLMNList PRESENCE optional }|

 { ID id-UERadioCapabilityID CRITICALITY reject EXTENSION UERadioCapabilityID PRESENCE optional }|

 { ID id-MBS-SessionInformation-List CRITICALITY ignore EXTENSION MBS-SessionInformation-List PRESENCE optional }|

 { ID id-FiveGProSeUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

 { ID id-UESliceMaximumBitRateList CRITICALITY ignore EXTENSION UESliceMaximumBitRateList PRESENCE optional }|

 { ID id-NRA2XUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

 { ID id-LTEA2XUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION LTEUESidelinkAggregateMaximumBitRate PRESENCE optional },

 ...

}

UEContextRefAtSN-HORequest ::= SEQUENCE {

 globalNG-RANNode-ID GlobalNG-RANNode-ID,

 sN-NG-RANnodeUEXnAPID NG-RANnodeUEXnAPID,

 iE-Extensions ProtocolExtensionContainer { {UEContextRefAtSN-HORequest-ExtIEs} } OPTIONAL,

 ...

}

UEContextRefAtSN-HORequest-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

**-- TEXT OMITTED –**

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-- RETRIEVE UE CONTEXT RESPONSE

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

RetrieveUEContextResponse ::= SEQUENCE {

 protocolIEs ProtocolIE-Container {{ RetrieveUEContextResponse-IEs}},

 ...

}

RetrieveUEContextResponse-IEs XNAP-PROTOCOL-IES ::= {

 { ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

 { ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

 { ID id-GUAMI CRITICALITY reject TYPE GUAMI PRESENCE mandatory}|

 { ID id-UEContextInfoRetrUECtxtResp CRITICALITY reject TYPE UEContextInfoRetrUECtxtResp PRESENCE mandatory}|

 { ID id-TraceActivation CRITICALITY ignore TYPE TraceActivation PRESENCE optional }|

 { ID id-MaskedIMEISV CRITICALITY ignore TYPE MaskedIMEISV PRESENCE optional }|

 { ID id-LocationReportingInformation CRITICALITY ignore TYPE LocationReportingInformation PRESENCE optional }|

 { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

 { ID id-NRV2XServicesAuthorized CRITICALITY ignore TYPE NRV2XServicesAuthorized PRESENCE optional }|

 { ID id-LTEV2XServicesAuthorized CRITICALITY ignore TYPE LTEV2XServicesAuthorized PRESENCE optional }|

 { ID id-PC5QoSParameters CRITICALITY ignore TYPE PC5QoSParameters PRESENCE optional }|

 { ID id-UEHistoryInformation CRITICALITY ignore TYPE UEHistoryInformation PRESENCE optional }|

 { ID id-UEHistoryInformationFromTheUE CRITICALITY ignore TYPE UEHistoryInformationFromTheUE PRESENCE optional }|

 { ID id-MDTPLMNList CRITICALITY ignore TYPE MDTPLMNList PRESENCE optional }

 { ID id-IABNodeIndication CRITICALITY reject TYPE IABNodeIndication PRESENCE optional }|

 { ID id-UEContextRefAtSN-HORequest CRITICALITY ignore TYPE UEContextRefAtSN-HORequest PRESENCE optional }|

 { ID id-TimeSynchronizationAssistanceInformation CRITICALITY ignore TYPE TimeSynchronizationAssistanceInformation PRESENCE optional }|

 { ID id-QMCConfigInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

 { ID id-FiveGProSeAuthorized CRITICALITY ignore TYPE FiveGProSeAuthorized PRESENCE optional }|

 { ID id-FiveGProSePC5QoSParameters CRITICALITY ignore TYPE FiveGProSePC5QoSParameters PRESENCE optional }|

 { ID id-AerialUESubscriptionInformation CRITICALITY ignore TYPE AerialUESubscriptionInformation PRESENCE optional }|

 { ID id-NRA2XServicesAuthorized CRITICALITY ignore TYPE NRA2XServicesAuthorized PRESENCE optional }|

 { ID id-LTEA2XServicesAuthorized CRITICALITY ignore TYPE LTEA2XServicesAuthorized PRESENCE optional }|

 { ID id-A2XPC5QoSParameters CRITICALITY ignore TYPE A2XPC5QoSParameters PRESENCE optional }|

 { ID id-MobileIAB-AuthorizationStatus CRITICALITY reject TYPE MobileIAB-AuthorizationStatus PRESENCE optional }|

 { ID id-SLPositioning-Ranging-Services-Info CRITICALITY ignore TYPE SLPositioning-Ranging-Services-Info  PRESENCE optional },|

 { ID id-ContinuousMDT CRITICALITY ignore TYPE NG-RANTraceID PRESENCE optional },

 ...

}

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