**3GPP TSG-RAN WG3 Meeting #123R3-240463**

**Athens, Greece, 26th Feb – 1st Mar, 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | 1319 | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **x** | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Correction on SON for NR-U | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, CMCC, Deutsche Telekom | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_enh2-Core | | | | |  | ***Date:*** | | | 2024-02-16 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***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 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:*** | | The source node requesting the target node to report the DL LBT Failure Information has been introduced in XnAP.  However, the relevant functionality is still missing in F1 interface. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Introduce the DL LBT Failure Information Request IE in the UE CONTEXT SETUP REQUEST amd the UE CONTEXT MODIFICATION message from gNB-CU to gNB-DU. 2. add a new class 2 procedure DU-CU Access and Mobility Indication to send the DL LBT Failure Information from the gNB-DU to the gNB-CU. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Collection of DL LBT Failure Information for the UE on F1 is not supported. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.3.1.2, 8.3.4.2, 8.11.x, 9.2.2.1, 9.2.2.7, 9.2.10.x, 9.3.1.x, 9.4.3, 9.4.4, 9.4.5, 9.4.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | | TS 38.470 CR0130 | | |
| ***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\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

8.3.1 UE Context Setup

8.3.1.1 General

The purpose of the UE Context Setup procedure is to establish the UE Context including, among others, SRB,DRB, BH RLC channel, Uu Relay RLC channel, PC5 Relay RLC channel, and SL DRB configuration. The procedure uses UE-associated signalling.

8.3.1.2 Successful Operation

****

**Figure** **8.3.1.2-1: UE Context Setup Request procedure: Successful Operation**

<Unchanged part skipped>

If the *LTM Complete Configuration Indicator* IE set to "complete" is contained in the *LTM Configuration* IE included in the UE CONTEXT SETUP RESPONSE message, the gNB-CU shall, if supported, consider that the LTM candidate configuration is a complete configuration.

If the *Indirect Path Addition* IE is contained in the *Path Addition Information* IE which is included in the UE CONTEXT SETUP REQUEST message, the gNB-DU shall, if supported, consider that the request concerns the indirect path addition for the MP Remote UE using PC5 link and use it as specified in TS 38.401 [4]. If the *N3C* *Indirect Path Addition* IE is contained in the *Path Addition Information* IE, the gNB-DU shall, if supported, consider that the request concerns the indirect path addition for the MP Remote UE using N3C and use it as specified in TS 38.401 [4].

If the *DL LBT Failure Information Request* IE is included in the UE CONTEXT SETUP REQUEST message, the gNB-DU node shall, if supported, consider that the gNB-CU has requested the DL LBT failure information of the UE in the target cell during handover and feedback to the gNB-CU in the DU-CU ACCESS AND MOBILITY INDICATION message when available.

**Interaction with UE Inactivity Notification procedure**

If the *SDT Volume Threshold* IE is contained in the UE CONTEXT SETUP REQUEST message, the gNB-DU shall, if supported, use the information during an SDT transaction to inform the gNB-CU via the UE INACTIVITY NOTIFICATION message as specified in TS 38.401 [4].

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 8.3.4 UE Context Modification (gNB-CU initiated)

#### 8.3.4.1 General

The purpose of the UE Context Modification procedure is to modify the established UE Context, e.g., establishing, modifying and releasing radio resources or sidelink resources. This procedure is also used to command the gNB-DU to stop data transmission for the UE for mobility (see TS 38.401 [4]). The procedure uses UE-associated signalling.

#### 8.3.4.2 Successful Operation



Figure 8.3.4.2-1: UE Context Modification procedure. Successful operation

The UE CONTEXT MODIFICATION REQUEST message is initiated by the gNB-CU.

<Unchanged part skipped>

If the *S-NSSAI* IE is included within the *DRB to Be Modified Item* IE in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall, if supported, store the corresponding information and replace any existing information.

If the *DL LBT Failure Information Request* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU node shall, if supported, consider that the gNB-CU has requested the DL LBT failure information of the UE in the target cell during handover and feedback to the gNB-CU in the DU-CU ACCESS AND MOBILITY INDICATION message when available.

**Interaction with UE Inactivity Notification procedure**

If the *SDT Volume Threshold* IE is contained in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall, if supported, use the information during an SDT transaction to inform the gNB-CU via the UE INACTIVITY NOTIFICATION message as specified in TS 38.401 [4].

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 8.11.x DU-CU Access and Mobility Indication

#### 8.11.x.1 General

This procedure is initiated by the gNB-DU to send the Access and Mobility related Information to the gNB-CU.

The procedure uses non-UE-associated signalling.

#### 8.11.x.2 Successful Operation



Figure 8.11.x.2-1: DU-CU Access and Mobility Indication procedure. Successful operation

The DU-CU Access and Mobility Indication procedure is initiated by DU-CU ACCESS AND MOBILITY INDICATION message sent from the gNB-DU to the gNB-CU.

If the DU-CU ACCESS AND MOBILITY INDICATION message contains the *DL LBT Failure Information List* IE, the gNB-CU shall take it into account for optimisation of mobility parameters.

#### 8.11.2.3 Abnormal Conditions

Not applicable.

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

9.2.2.1 UE CONTEXT SETUP REQUEST

This message is sent by the gNB-CU to request the setup of a UE context.

Direction: gNB-CU → gNB-DU.

| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | reject |
| gNB-CU UE F1AP ID | M |  | 9.3.1.4 |  | YES | reject |
| gNB-DU UE F1AP ID | O |  | 9.3.1.5 |  | YES | ignore |
| SpCell ID | M |  | NR CGI 9.3.1.12 | Special Cell as defined in TS 38.321 [16]. For handover case, this IE is considered as target cell. | YES | reject |
| Unchanged part skipped | | | | | | |
| NR UE Sidelink Aggregate Maximum Bit Rate for A2X | O |  | 9.3.1.119 | This IE applies only if the UE is authorized for NR A2X services. | YES | ignore |
| LTE UE Sidelink Aggregate Maximum Bit Rate for A2X | O |  | 9.3.1.118 | This IE applies only if the UE is authorized for LTE A2X services. | YES | ignore |
| DL LBT Failure Information Request | O |  | ENUMERATED (inquiry, …) | This IE indicates that information on DL LBT Failures occurring at the target gNB-DU during handover execution that results in mobility failure is requested | YES | ignore |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#### 9.2.2.7 UE CONTEXT MODIFICATION REQUEST

This message is sent by the gNB-CU to provide UE Context information changes to the gNB-DU.

Direction: gNB-CU → gNB-DU

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | reject |
| gNB-CU UE F1AP ID | M |  | 9.3.1.4 |  | YES | reject |
| gNB-DU UE F1AP ID | M |  | 9.3.1.5 |  | YES | reject |
| SpCell ID | O |  | NR CGI 9.3.1.12 | Special Cell as defined in TS 38.321 [16]. For handover case, this IE is considered as target cell. | YES | ignore |
| Unchanged part skipped | | | | | | |
| NR UE Sidelink Aggregate Maximum Bit Rate for A2X | O |  | 9.3.1.119 | This IE applies only if the UE is authorized for NR A2X services. | YES | ignore |
| LTE UE Sidelink Aggregate Maximum Bit Rate for A2X | O |  | 9.3.1.118 | This IE applies only if the UE is authorized for LTE A2X services. | YES | ignore |
| DL LBT Failure Information Request | O |  | ENUMERATED (inquiry, …) | This IE indicates that information on DL LBT Failures occurring at the gNB-DU during handover execution that results in mobility failure is requested | YES | ignore |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#### 9.2.10.x DU-CU ACCESS AND MOBILITY INDICATION

This message is sent by the gNB-DU to provide access and mobility information to the gNB-CU.

Direction: gNB-DU → gNB-CU.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | ignore |
| Transaction ID | M |  | 9.3.1.23 |  | YES | reject |
| **DL LBT Failure Information List** |  | *0..1* |  |  | YES | ignore |
| **> DL LBT Failure Information Item** |  | *1 .. <maxnoofLBTFailureInformation>* |  |  |  |  |
| >>DL LBT Failure Information | M |  | 9.3.1.x |  | – |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofLBTFailureInformation | Maximum no. of UEs for which LBT Failure Information is provided, the maximum value is 64. |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#### 9.3.1.x DL LBT Failure Information

This IE contains information on DL LBT Failures at the target gNB-DU during handover execution.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| UE Assistant Identifier | M |  | gNB-CU UE AP ID  9.2.3.16 |  |
| Number of DL LBT Failures | O |  | INTEGER (1..1000,…) | This IE indicates the number of DL LBT Failures, if available, occurring at the target gNB-DU during handover execution |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 9.4.3 Elementary Procedure Definitions

-- ASN1START

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

--

-- Elementary Procedure definitions

--

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

F1AP-PDU-Descriptions {

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

ngran-access (22) modules (3) f1ap (3) version1 (1) f1ap-PDU-Descriptions (0)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

--

-- IE parameter types from other modules.

--

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

IMPORTS

Criticality,

ProcedureCode

FROM F1AP-CommonDataTypes

Reset,

ResetAcknowledge,

F1SetupRequest,

<Skip unchanged part>

MulticastCommonConfigurationRequest,

MulticastCommonConfigurationResponse,

MulticastCommonConfigurationRefuse,

BroadcastTransportResourceRequest，

DUCUAccessAndMobilityIndication

FROM F1AP-PDU-Contents

id-Reset,

id-F1Setup,

id-gNBDUConfigurationUpdate,

id-gNBCUConfigurationUpdate,

id-UEContextSetup,

id-UEContextRelease,

id-UEContextModification,

id-UEContextModificationRequired,

id-dUCUAccessAndMobilityIndication,

<Skip unchanged part>

id-MIABF1SetupOutcomeNotification,

id-MulticastContextNotification,

id-MulticastCommonConfiguration,

id-BroadcastTransportResourceRequest

<Skip unchanged part>

F1AP-ELEMENTARY-PROCEDURES-CLASS-2 F1AP-ELEMENTARY-PROCEDURE ::= {

errorIndication |

uEContextReleaseRequest |

dLRRCMessageTransfer |

uLRRCMessageTransfer |

uEInactivityNotification |

privateMessage |

initialULRRCMessageTransfer |

systemInformationDelivery |

paging |

notify |

pWSRestartIndication |

pWSFailureIndication |

gNBDUStatusIndication |

rRCDeliveryReport |

networkAccessRateReduction |

traceStart |

deactivateTrace |

dUCURadioInformationTransfer |

cUDURadioInformationTransfer |

resourceStatusReporting |

accessAndMobilityIndication |

referenceTimeInformationReportingControl|

referenceTimeInformationReport |

accessSuccess |

cellTrafficTrace |

positioningAssistanceInformationControl |

positioningAssistanceInformationFeedback |

positioningMeasurementReport |

positioningMeasurementAbort |

positioningMeasurementFailureIndication |

positioningMeasurementUpdate |

positioningDeactivation |

e-CIDMeasurementFailureIndication |

e-CIDMeasurementReport |

e-CIDMeasurementTermination |

positioningInformationUpdate |

multicastGroupPaging |

broadcastContextReleaseRequest |

multicastContextReleaseRequest |

pDCMeasurementReport |

pDCMeasurementTerminationCommand |

pDCMeasurementFailureIndication |

measurementActivation |

qoEInformationTransfer |

posSystemInformationDelivery |

dUCUCellSwitchNotification |

cUDUCellSwitchNotification |

dUCUTAInformationTransfer |

cUDUTAInformationTransfer |

qoEInformationTransferControl |

rachIndication |

timingSynchronisationStatusReport |

mIABF1SetupTriggering |

mIABF1SetupOutcomeNotification |

broadcastTransportResourceRequest |

dUCUAccessAndMobilityIndication,

...

}

<Skip unchanged part>

broadcastTransportResourceRequest F1AP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE BroadcastTransportResourceRequest

PROCEDURE CODE id-BroadcastTransportResourceRequest

CRITICALITY reject

}

dUCUAccessAndMobilityIndication F1AP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE DUCUAccessAndMobilityIndication

PROCEDURE CODE id-dUCUAccessAndMobilityIndication

CRITICALITY ignore

}

END

-- ASN1STOP

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 9.4.4 PDU Definitions

-- ASN1START

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

--

-- PDU definitions for F1AP.

--

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

F1AP-PDU-Contents {

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

ngran-access (22) modules (3) f1ap (3) version1 (1) f1ap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

<Skip unchanged part>

LTEA2XServicesAuthorized,

NReRedCapUEIndication,

NRPaginglongeDRXInformationforRRCINACTIVE,

Cells-With-SSBs-Activated-List,

Recommended-SSBs-for-Paging-List,

DLLBTFailureInformationRequest, DLLBTFailureInformationList

<Skip unchanged part>

id-LTEA2XServicesAuthorized,

id-NRUESidelinkAggregateMaximumBitrateForA2X,

id-LTEUESidelinkAggregateMaximumBitrateForA2X,

id-NReRedCapUEIndication,

id-NRPaginglongeDRXInformationforRRCINACTIVE,

id-DLLBTFailureInformationRequest,

id-DLLBTFailureInformationList,

FROM F1AP-IEs

PrivateIE-Container{},

ProtocolExtensionContainer{},

ProtocolIE-Container{},

ProtocolIE-ContainerPair{},

ProtocolIE-SingleContainer{},

F1AP-PRIVATE-IES,

F1AP-PROTOCOL-EXTENSION,

F1AP-PROTOCOL-IES,

F1AP-PROTOCOL-IES-PAIR

<Skip unchanged part>

UEContextModificationRequestIEs F1AP-PROTOCOL-IES ::= {

{ ID id-gNB-CU-UE-F1AP-ID CRITICALITY reject TYPE GNB-CU-UE-F1AP-ID PRESENCE mandatory }|

{ ID id-gNB-DU-UE-F1AP-ID CRITICALITY reject TYPE GNB-DU-UE-F1AP-ID PRESENCE mandatory }|

{ ID id-SpCell-ID CRITICALITY ignore TYPE NRCGI PRESENCE optional }|

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

{ ID id-SpCellULConfigured CRITICALITY ignore TYPE CellULConfigured PRESENCE optional }|

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

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

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

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

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

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

{ ID id-SCell-ToBeSetupMod-List CRITICALITY ignore TYPE SCell-ToBeSetupMod-List PRESENCE optional }|

{ ID id-SCell-ToBeRemoved-List CRITICALITY ignore TYPE SCell-ToBeRemoved-List PRESENCE optional }|

{ ID id-SRBs-ToBeSetupMod-List CRITICALITY reject TYPE SRBs-ToBeSetupMod-List PRESENCE optional }|

{ ID id-DRBs-ToBeSetupMod-List CRITICALITY reject TYPE DRBs-ToBeSetupMod-List PRESENCE optional }|

{ ID id-DRBs-ToBeModified-List CRITICALITY reject TYPE DRBs-ToBeModified-List PRESENCE optional }|

{ ID id-SRBs-ToBeReleased-List CRITICALITY reject TYPE SRBs-ToBeReleased-List PRESENCE optional }|

{ ID id-DRBs-ToBeReleased-List CRITICALITY reject TYPE DRBs-ToBeReleased-List PRESENCE optional }|

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

{ ID id-RAT-FrequencyPriorityInformation CRITICALITY reject TYPE RAT-FrequencyPriorityInformation PRESENCE optional }|

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

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

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

{ ID id-GNB-DUConfigurationQuery CRITICALITY reject TYPE GNB-DUConfigurationQuery PRESENCE optional }|

{ ID id-GNB-DU-UE-AMBR-UL CRITICALITY ignore TYPE BitRate PRESENCE optional }|

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

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

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

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

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

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

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

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

{ ID id-BHChannels-ToBeSetupMod-List CRITICALITY reject TYPE BHChannels-ToBeSetupMod-List PRESENCE optional }|

{ ID id-BHChannels-ToBeModified-List CRITICALITY reject TYPE BHChannels-ToBeModified-List PRESENCE optional }|

{ ID id-BHChannels-ToBeReleased-List CRITICALITY reject TYPE BHChannels-ToBeReleased-List PRESENCE optional }|

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

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

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

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

{ ID id-PC5LinkAMBR CRITICALITY ignore TYPE BitRate PRESENCE optional}|

{ ID id-SLDRBs-ToBeSetupMod-List CRITICALITY reject TYPE SLDRBs-ToBeSetupMod-List PRESENCE optional }|

{ ID id-SLDRBs-ToBeModified-List CRITICALITY reject TYPE SLDRBs-ToBeModified-List PRESENCE optional }|

{ ID id-SLDRBs-ToBeReleased-List CRITICALITY reject TYPE SLDRBs-ToBeReleased-List PRESENCE optional }|

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

{ ID id-F1CTransferPath CRITICALITY reject TYPE F1CTransferPath PRESENCE optional }|

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

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

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

{ ID id-F1CTransferPathNRDC CRITICALITY reject TYPE F1CTransferPathNRDC PRESENCE optional }|

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

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

{ ID id-CG-SDTQueryIndication CRITICALITY ignore TYPE CG-SDTQueryIndication PRESENCE optional }|

{ ID id-FiveG-ProSeAuthorized CRITICALITY ignore TYPE FiveG-ProSeAuthorized PRESENCE optional }|

{ ID id-FiveG-ProSeUEPC5AggregateMaximumBitrate CRITICALITY ignore TYPE NRUESidelinkAggregateMaximumBitrate PRESENCE optional }|

{ ID id-FiveG-ProSePC5LinkAMBR CRITICALITY ignore TYPE BitRate PRESENCE optional}|

{ ID id-UpdatedRemoteUELocalID CRITICALITY ignore TYPE RemoteUELocalID PRESENCE optional }|

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

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

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

{ ID id-PC5RLCChannelToBeSetupList CRITICALITY reject TYPE PC5RLCChannelToBeSetupList PRESENCE optional}|

{ ID id-PC5RLCChannelToBeModifiedList CRITICALITY reject TYPE PC5RLCChannelToBeModifiedList PRESENCE optional}|

{ ID id-PC5RLCChannelToBeReleasedList CRITICALITY reject TYPE PC5RLCChannelToBeReleasedList PRESENCE optional}|

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

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

{ ID id-MulticastMBSSessionSetupList CRITICALITY reject TYPE MulticastMBSSessionList PRESENCE optional }|

{ ID id-MulticastMBSSessionRemoveList CRITICALITY reject TYPE MulticastMBSSessionList PRESENCE optional }|

{ ID id-UE-MulticastMRBs-ToBeSetup-atModify-List CRITICALITY reject TYPE UE-MulticastMRBs-ToBeSetup-atModify-List PRESENCE optional }|

{ ID id-UE-MulticastMRBs-ToBeReleased-List CRITICALITY reject TYPE UE-MulticastMRBs-ToBeReleased-List PRESENCE optional }|

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

{ ID id-ManagementBasedMDTPLMNModificationList CRITICALITY ignore TYPE MDTPLMNModificationList PRESENCE optional }|

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

{ ID id-DAPS-HO-Status CRITICALITY ignore TYPE DAPS-HO-Status PRESENCE optional }|

{ ID id-ServingCellMO-List CRITICALITY ignore TYPE ServingCellMO-List PRESENCE optional }|

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

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

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

{ ID id-SDT-Volume-Threshold CRITICALITY ignore TYPE SDT-Volume-Threshold PRESENCE optional }|

{ ID id-LTMInformation-Modify CRITICALITY reject TYPE LTMInformation-Modify PRESENCE optional }|

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

{ ID id-EarlySyncInformation-Request CRITICALITY ignore TYPE EarlySyncInformation-Request PRESENCE optional }|

{ ID id-EarlySyncInformation-List CRITICALITY ignore TYPE EarlySyncInformation-List PRESENCE optional }|

{ ID id-LTMCells-ToBeReleased-List CRITICALITY ignore TYPE LTMCells-ToBeReleased-List PRESENCE optional }|

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

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

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

{ ID id-NRUESidelinkAggregateMaximumBitrateForA2X CRITICALITY ignore TYPE NRUESidelinkAggregateMaximumBitrate PRESENCE optional }|

{ ID id-LTEUESidelinkAggregateMaximumBitrateForA2X CRITICALITY ignore TYPE LTEUESidelinkAggregateMaximumBitrate PRESENCE optional }|

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

...

}

<Skip unchanged part>

UEContextSetupRequestIEs F1AP-PROTOCOL-IES ::= {

{ ID id-gNB-CU-UE-F1AP-ID CRITICALITY reject TYPE GNB-CU-UE-F1AP-ID PRESENCE mandatory }|

{ ID id-gNB-DU-UE-F1AP-ID CRITICALITY ignore TYPE GNB-DU-UE-F1AP-ID PRESENCE optional }|

{ ID id-SpCell-ID CRITICALITY reject TYPE NRCGI PRESENCE mandatory }|

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

{ ID id-SpCellULConfigured CRITICALITY ignore TYPE CellULConfigured PRESENCE optional }|

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

{ ID id-Candidate-SpCell-List CRITICALITY ignore TYPE Candidate-SpCell-List PRESENCE optional }|

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

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

{ ID id-SCell-ToBeSetup-List CRITICALITY ignore TYPE SCell-ToBeSetup-List PRESENCE optional }|

{ ID id-SRBs-ToBeSetup-List CRITICALITY reject TYPE SRBs-ToBeSetup-List PRESENCE optional }|

{ ID id-DRBs-ToBeSetup-List CRITICALITY reject TYPE DRBs-ToBeSetup-List PRESENCE optional }|

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

{ ID id-RAT-FrequencyPriorityInformation CRITICALITY reject TYPE RAT-FrequencyPriorityInformation PRESENCE optional }|

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

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

{ ID id-ServingPLMN CRITICALITY ignore TYPE PLMN-Identity PRESENCE optional }|

{ ID id-GNB-DU-UE-AMBR-UL CRITICALITY ignore TYPE BitRate PRESENCE conditional }|

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

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

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

{ ID id-new-gNB-CU-UE-F1AP-ID CRITICALITY reject TYPE GNB-DU-UE-F1AP-ID PRESENCE optional }|

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

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

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

{ ID id-BHChannels-ToBeSetup-List CRITICALITY reject TYPE BHChannels-ToBeSetup-List PRESENCE optional }|

{ ID id-ConfiguredBAPAddress CRITICALITY reject TYPE BAPAddress PRESENCE optional }|

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

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

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

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

{ ID id-PC5LinkAMBR CRITICALITY ignore TYPE BitRate PRESENCE optional}|

{ ID id-SLDRBs-ToBeSetup-List CRITICALITY reject TYPE SLDRBs-ToBeSetup-List PRESENCE optional }|

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

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

{ ID id-ServingNID CRITICALITY reject TYPE NID PRESENCE optional }|

{ ID id-F1CTransferPath CRITICALITY reject TYPE F1CTransferPath PRESENCE optional }|

{ ID id-F1CTransferPathNRDC CRITICALITY reject TYPE F1CTransferPathNRDC PRESENCE optional }|

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

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

{ ID id-CG-SDTSessionInfoOld CRITICALITY ignore TYPE CG-SDTSessionInfo PRESENCE optional }|

{ ID id-FiveG-ProSeAuthorized CRITICALITY ignore TYPE FiveG-ProSeAuthorized PRESENCE optional }|

{ ID id-FiveG-ProSeUEPC5AggregateMaximumBitrate CRITICALITY ignore TYPE NRUESidelinkAggregateMaximumBitrate PRESENCE optional }|

{ ID id-FiveG-ProSePC5LinkAMBR CRITICALITY ignore TYPE BitRate PRESENCE optional}|

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

{ ID id-PC5RLCChannelToBeSetupList CRITICALITY reject TYPE PC5RLCChannelToBeSetupList PRESENCE optional}|

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

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

{ ID id-MulticastMBSSessionSetupList CRITICALITY reject TYPE MulticastMBSSessionList PRESENCE optional }|

{ ID id-UE-MulticastMRBs-ToBeSetup-List CRITICALITY reject TYPE UE-MulticastMRBs-ToBeSetup-List PRESENCE optional }|

{ ID id-ServingCellMO-List CRITICALITY ignore TYPE ServingCellMO-List PRESENCE optional }|

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

{ ID id-SDT-Volume-Threshold CRITICALITY ignore TYPE SDT-Volume-Threshold PRESENCE optional }|

{ ID id-LTMInformation-Setup CRITICALITY reject TYPE LTMInformation-Setup PRESENCE optional }|

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

{ ID id-EarlySyncInformation-Request CRITICALITY ignore TYPE EarlySyncInformation-Request PRESENCE optional }|

{ ID id-Source-gNB-DU-ID CRITICALITY reject TYPE GNB-DU-ID PRESENCE optional }|

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

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

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

{ ID id-NRUESidelinkAggregateMaximumBitrateForA2X CRITICALITY ignore TYPE NRUESidelinkAggregateMaximumBitrate PRESENCE optional }|

{ ID id-LTEUESidelinkAggregateMaximumBitrateForA2X CRITICALITY ignore TYPE LTEUESidelinkAggregateMaximumBitrate PRESENCE optional }|

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

...

}

<Skip unchanged part>

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

--

-- Timing Synchronisation Status Reporting Elementary Procedure

--

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

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

--

-- TIMING SYNCHRONISATION STATUS REPORT

--

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

TimingSynchronisationStatusReport::= SEQUENCE {

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

...

}

TimingSynchronisationStatusReport-IEs F1AP-PROTOCOL-IES ::= {

{ ID id-RANTimingSynchronisationStatusInfo CRITICALITY ignore TYPE RANTimingSynchronisationStatusInfo PRESENCE mandatory },

...

}

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

--

-- DU-CU Access And Mobility Indication ELEMENTARY PROCEDURE

--

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

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

--

-- DU-CU Access And Mobility Indication

--

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

DUCUAccessAndMobilityIndication ::= SEQUENCE {

protocolIEs ProtocolIE-Container { { DUCUAccessAndMobilityIndicationIEs} },

...

}

DUCUAccessAndMobilityIndicationIEs F1AP-PROTOCOL-IES ::= {

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

{ ID id-DLLBTFailureInformationList CRITICALITY ignore TYPE DLLBTFailureInformationList PRESENCE optional},

...

}

END

-- ASN1STOP

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 9.4.5 Information Element Definitions

-- ASN1START

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

--

-- Information Element Definitions

--

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

F1AP-IEs {

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

ngran-access (22) modules (3) f1ap (3) version1 (1) f1ap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

<Skip unchanged part>

maxnoofSuccessfulPSCellChangeReports,

maxnoofPeriodicities,

maxnoofThresholdMBS,

maxMBSSessionsinSessionInfoList,

maxnoofLBTFailureInformation

<Skip unchanged part>

DynamicPQIDescriptor ::= SEQUENCE {

resourceType ENUMERATED {gbr, non-gbr, delay-critical-grb, ...} OPTIONAL,

qoSPriorityLevel INTEGER (1..8, ...),

packetDelayBudget PacketDelayBudget,

packetErrorRate PacketErrorRate,

averagingWindow AveragingWindow OPTIONAL,

-- C-ifGBRflow: This IE shall be present if the GBR QoS Flow Information IE is present in the QoS Flow Level QoS Parameters IE.

maxDataBurstVolume MaxDataBurstVolume OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { DynamicPQIDescriptor-ExtIEs } } OPTIONAL

}

DynamicPQIDescriptor-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

...

}

DLLBTFailureInformationRequest ::= ENUMERATED {inquiry, ...}

DLLBTFailureInformationList ::= SEQUENCE (SIZE(1.. maxnoofLBTFailureInformation)) OF DLLBTFailureInformationList-Item

DLLBTFailureInformationList-Item::= SEQUENCE {

uEAssistantIdentifier GNB-CU-UE-F1AP-ID,

numberOfDLLBTFailures INTEGER (1..1000,...) OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { DLLBTFailureInformationList-Item-ExtIEs} } OPTIONAL,

...

}

DLLBTFailureInformationList-Item-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

...

}

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 9.4.7 Constant Definitions

-- ASN1START

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

--

-- Constant definitions

--

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

F1AP-Constants {

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

ngran-access (22) modules (3) f1ap (3) version1 (1) f1ap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

<Skip unchanged part>

id-MIABF1SetupOutcomeNotification ProcedureCode ::= 91

id-MulticastContextNotification ProcedureCode ::= 92

id-MulticastCommonConfiguration ProcedureCode ::= 93

id-BroadcastTransportResourceRequest ProcedureCode ::= 94

id-DUCUAccessAndMobilityIndication ProcedureCode ::= xx

<Skip unchanged part>

maxnoofUEsInQMCTransferControlMessage INTEGER ::= 512

maxnoofUEsforRAReportIndications INTEGER ::= 64

maxnoofSuccessfulPSCellChangeReports INTEGER ::= 64

maxnoofPeriodicities INTEGER ::= 8

maxnoofThresholdMBS INTEGER ::= 64

maxMBSSessionsinSessionInfoList INTEGER ::= 1024

maxnoofLBTFailureInformation INTEGER ::= 64

<Skip unchanged part>

id-ECNMarkingorCongestionInformationReportingStatus ProtocolIE-ID ::= 778

id-NRA2XServicesAuthorized ProtocolIE-ID ::= 779

id-LTEA2XServicesAuthorized ProtocolIE-ID ::= 780

id-NRUESidelinkAggregateMaximumBitrateForA2X ProtocolIE-ID ::= 781

id-LTEUESidelinkAggregateMaximumBitrateForA2X ProtocolIE-ID ::= 782

id-NReRedCapUEIndication ProtocolIE-ID ::= 783

id-ERedcap-Bcast-Information ProtocolIE-ID ::= 784

id-NRPaginglongeDRXInformationforRRCINACTIVE ProtocolIE-ID ::= 785

id-DLLBTFailureInformationRequest ProtocolIE-ID ::= XXX

id-DLLBTFailureInformationList ProtocolIE-ID ::= YYY

END

-- ASN1STOP

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*End of changes\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/