**3GPP TSG-RAN3 Meeting #110-e R3-206140**

**2 – 12 November 2020 E-Meeting**

**Title:** (TP on MDT in MR-DC for 38.423) Addition of immediate MDT in NGEN-DC and NE-DC

**Source:** CATT

**Agenda item:** 10.3.2.2

**Document Type:** other

1. Introduction

This contributionis the TP for TS38.423 v16.3.0 with addition of immediate MDT in NGEN-DC and NE-DC.

2. Discussion

At the RAN3 meeting #109-e, the following agreement has been achieved:

|  |
| --- |
| For management based immediate MDT in NR-DC, OAM provides the MDT configuration to MN and SN independently.  For MDT in NGEN-DC and NE-DC, the SN receiving the management based immediate MDT and the signalling based immediate MDT in EN-DC is taken as baseline. |

This contribution is the TP for TS38.423 to support immediate MDT in NGEN-DC and NE-DC.

3. Annex – TP

*Start of the first change*

# 8 XnAP procedures

Table 8.1-2: Class 2 Elementary Procedures

| Elementary Procedure | Initiating Message |
| --- | --- |
| Handover Cancel | HANDOVER CANCEL |
| SN Status Transfer | SN STATUS TRANSFER |
| RAN Paging | RAN PAGING |
| Xn-U Address Indication | XN-U ADDRESS INDICATION |
| S-NG-RAN node Reconfiguration Completion | S-NODE RECONFIGURATION COMPLETE |
| S-NG-RAN node Counter Check | S-NODE COUNTER CHECK REQUEST |
| UE Context Release | UE CONTEXT RELEASE |
| RRC Transfer | RRC TRANSFER |
| Error Indication | ERROR INDICATION |
| Notification Control Indication | NOTIFICATION CONTROL INDICATION |
| Activity Notification | ACTIVITY NOTIFICATION |
| Secondary RAT Data Usage Report | SECONDARY RAT DATA USAGE REPORT |
| Trace Start | TRACE START |
| Deactivate Trace | DEACTIVATE TRACE |
| Handover Success | HANDOVER SUCCESS |
| Conditional Handover Cancel | CONDITIONAL HANDOVER CANCEL |
| Early Status Transfer | EARLY STATUS TRANSFER |
| Failure Indication | FAILURE INDICATION |
| Handover Report | HANDOVER REPORT |
| Resource Status Reporting | RESOURCE STATUS UPDATE |
| Access And Mobility Indication | ACCESS AND MOBILITY INDICATION |
| Cell Traffic Trace | CELL TRAFFIC TRACE |

### 8.3.1 S-NG-RAN node Addition Preparation

#### 8.3.1.1 General

The purpose of the S-NG-RAN node Addition Preparation procedure is to request the S-NG-RAN node to allocate resources for dual connectivity operation for a specific UE.

The procedure uses UE-associated signalling.

#### 8.3.1.2 Successful Operation



Figure 8.3.1.2-1: S-NG-RAN node Addition Preparation, successful operation

The M-NG-RAN node initiates the procedure by sending the S-NODE ADDITION REQUEST message to the S-NG-RAN node.

When the M-NG-RAN node sends the S-NODE ADDITION REQUEST message, it shall start the timer TXnDCprep.

The allocation of resources according to the values of the *Allocation and Retention Priority* IE included in the *QoS Flow Level QoS Parameters* IE for each QoS flow shall follow the principles specified for the PDU Session Resource Setup procedure in TS 38.413 [5].

The S-NG-RAN node shall choose the ciphering algorithm based on the information in the *UE Security Capabilities* IE and locally configured priority list of AS encryption algorithms and apply the key indicated in the *S-NG-RAN node Security Key* IE as specified in TS 33.501 [28].

If the *TSC Traffic Characteristics* IE is included for a QoS flow in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall behave the same as the NG-RAN node in the PDU Session Resource Setup procedure, specified in TS 38.413 [5].

If the *Additional QoS* *Flow Information* IE is included for a QoS flow in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall behave the same as the NG-RAN node in the PDU Session Resource Setup procedure, specified in TS 38.413 [5].

For each PDU session, if the *Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE contained in the *PDU Session Resources To Be Added List* IE and the *Common Network Instance* IE is not present, the S-NG-RAN node shall, if supported, use it when selecting transport network resource as specified in TS 23.501 [7].

For each GBR QoS flow, if the *Offered GBR QoS Flow Information* IE is included in the *QoS Flows To Be Setup List* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node may request the M-NG-RAN node to configure the DRB to which that QoS flow is mapped with MCG resources.

For each PDU session, if the *Non-GBR Resources Offered* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE contained in the *PDU Session Resources To Be Added List* IE and set to "true", the S-NG-RAN node may request the M-NG-RAN node to configure DRBs to which non-GBR QoS flows of the PDU session are mapped with MCG resources.

For each PDU session, if the *Common* *Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE contained in the *PDU Session Resources To Be Added List* IE, the S-NG-RAN node shall, if supported, use it when selecting transport network resource as specified in TS 23.501 [7].

Redundant transmission:

- For each PDU session, if the *Redundant UL NG-U UP TNL Information at UPF* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node shall, if supported, use it as the uplink termination point for the user plane data for this PDU session for the redundant transmission and it shall include the *Redundant DL NG-U UP TNL Information at NG-RAN* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE as described in TS 23.501 [9].

- For each PDU session, if the *Redundant Common Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE the S-NG-RAN node shall, if supported, use it when selecting transport network resource for the redundant transmission as specified in TS 23.501 [7].

- For each PDU session for which the *Redundant QoS Flow Indicator* IE is include in *QoS Flows To Be Setup List* IE contained in the *S-NODE ADDITION REQUEST* message, the S-NG-RAN node shall, if supported, store and use it as specified in TS 23.501 [7].

- For each PDU session, if the *Redundant PDU Session Information* IE is included in the *PDU Session Resource Setup Info - SN terminated* IE in the S-NODE ADDITION REQUEST message, the S-NODE-RAN node shall, if supported, store the received information in the UE context and setup the redundant user plane resources for the concerned PDU session, as specified in TS 23.501 [7].

- For each PDU session resource successfully setup for which the *Redundant PDU Session Information* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, include the *Used RSN Information* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If the S-NODE ADDITION REQUEST message contains the *Selected PLMN* IE, the S-NG-RAN node may use it for RRM purposes.

If the S-NODE ADDITION REQUEST message contains the *Expected UE Behaviour* IE, the S-NG-RAN node shall, if supported, store this information and may use it to optimize resource allocation.

If the S-NODE ADDITION REQUEST message contains the *Mobility Restriction List* IE, the S-NG-RAN node, if supported, shall store this information and use it to select an appropriate SCG.

If the S-NODE ADDITION REQUEST message contains the *Index to RAT/Frequency Selection Priority* IE, the S-NG-RAN node may use it for RRM purposes.

If the S-NG-RAN node is a gNB and the S-NODE ADDITION REQUEST message contains the *PCell ID* IE, the S-NG-RAN node shall search for the target NR cell among the NR neighbour cells of the PCell indicated, as specified in the TS 37.340 [8].

If the S-NODE ADDITION REQUEST message contains the *S-NG-RAN node PDU Session Aggregate Maximum Bit Rate* IE, the S-NG-RAN node may use it for RRM purposes.

If the S-NODE ADDITION REQUEST message contains the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node should forward it to lower layers and it may use it for the purpose of resource coordination with the M-NG-RAN node. The S-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The S-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the S-NG-RAN node and the M-NG-RAN node.

If the S-NODE ADDITION REQUEST message contains the *NE-DC TDM Pattern* IE, the S-NG-RAN node should forward it to lower layers and use it for the purpose of single uplink transmission. The S-NG-RAN node shall consider the value of the received *NE-DC TDM Pattern* IE valid until reception of a new update of the IE for the same UE.

If the S-NODE ADDITION REQUEST message contains the *QoS Flow Mapping Indication* IE, the S-NG-RAN node may take it into account that only the uplink or downlink QoS flow is mapped to the DRB.

For each bearer for which allocation of the PDCP entity is requested at the S-NG-RAN node:

- the M-NG-RAN node may propose to apply forwarding of downlink data by including the *DL Forwarding* IE within *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message. For each bearer that it has decided to admit, the S-NG-RAN node may include the *DL Forwarding GTP Tunnel Endpoint* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE of the S-NODE ADDITION REQUEST ACKNOWLEDGE message to indicate that it accepts the proposed forwarding of downlink data for this bearer.

- the S-NG-RAN node may include for each bearer in the *PDU Session Resource Setup Response Info – SN terminated* IE the *UL Forwarding GTP Tunnel Endpoint* IE to indicates it request data forwarding of uplink packets to be performed for that bearer.

- the M-NG-RAN node shall include *RLC Mode* IE for each bearer offloaded from M-NG-RAN node to S-NG-RAN node in the *DRBs to QoS Flow Mapping List* IE within the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDTION REQUEST message, and the *RLC Mode* IE indicates the mode that the M-NG-RAN used for the DRB when it was hosted at the M-NG-RAN node.

For each bearer for which the PDCP entity is at the M-NG-RAN node:

- the M-NG-RAN node shall include the *RLC mode* IE for each bearer in the *DRBs To Be Setup List* IE within the *PDU Session Resource Setup Info – MN terminated* IE of the S-NODE ADDTION REQUEST message to indicate the RLC mode has been configured at the M-NG-RAN node, so that the S-NG-RAN node shall configure the same RLC mode for this MN terminated split bearer.

The M-NG-RAN node may also propose to apply forwarding of UL data when offloading QoS flows for which in-order delivery is requested by including the *UL Forwarding* *Proposal* IE in the *Data Forwarding and Offloading Info from source NG-RAN node* IE within the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message. The S-NG-RAN node may include the *PDU Session Level UL Data Forwarding UP TNL Information* IE in the *Data Forwarding Info from target NG-RAN node* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE of the S-NODE ADDITION REQUEST ACKNOWLEDGE message to indicate that it accepts the proposed forwarding.

If the *Masked IMEISV* IE is contained in the S-NODE ADDITION REQUEST message the S-NG-RAN node shall, if supported, use it to determine the characteristics of the UE for subsequent handling.

If the *UE Radio Capability ID* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store this information in the UE context and use it as defined in TS 23.501 [7] and TS 23.502 [13].

The S-NG-RAN node shall report to the M-NG-RAN node, in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, the result for all the requested PDU session resources in the following way:

- A list of PDU session resources which are successfully established shall be included in the *PDU Session Resources Admitted To Be Added List* IE.

- A list of PDU session resources which failed to be established shall be included in the *PDU Session Resources Not Admitted List* IE.

Upon reception of the S-NODE ADDITION REQUEST ACKNOWLEDGE message the M-NG-RAN node shall stop the timer TXnDCprep.

If the S-NODE ADDITION REQUEST ACKNOWLEDGE message contains the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node may use it for the purpose of resource coordination with the S-NG-RAN node. The M-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The M-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the M-NG-RAN node and the S-NG-RAN node.

The S-NG-RAN node may include for each bearer in the *DRBs To Be Setup List* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message the *PDCP SN Length* IE to indicate the PDCP SN length for that DRB.

If the *S-NG-RAN node UE XnAP ID* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store this information and use it as defined in TS 37.340 [8].

If the S-NODE ADDITION REQUEST message contains the *PDCP SN Length* IE, the S-NG-RAN node shall, if supported, store this information and use it for lower layer configuration of the concerned MN terminated bearer.

If the S-NODE ADDITION REQUEST message contains the *SN Addition Trigger Indication* IE, the S-NG-RAN node shall include the *RRC config indication* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message to inform the M-NG-RAN node if the S-NG-RAN node applied full or delta configuration, as specified in TS 37.340 [8].

If the S-NODE ADDITION REQUEST message contains the *S-NG-RAN node Maximum Integrity Protected Data Rate* *Uplink* IE or the *S-NG-RAN node Maximum Integrity Protected Data Rate Downlink* IE, the S-NG-RAN node shall use the received information when enforcing the maximum integrity protected data rate for the UE.

If the *Security Indication* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message, the behaviour of the S-NG-RAN node shall be the same as specified for the same IE in the *PDU Session Resources To Be Setup List* IE in the Handover Preparation procedure, for the concerned PDU session, and the S-NG-RAN node shall include the *Security Result* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE.

If the *Security Result* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message, the S-NG-RAN node may take the information into account when deciding whether to perform user plane integrity protection or ciphering for the DRBs that it establishes for the concerned PDU session, except if the *Split Session Indicator* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE and set to "split", in which case it shall perform user plane integrity protection or ciphering according to the information in the *Security Result* IE*.* If the S-NG-RAN node is an ng-eNB, it shall reject all PDU sessions for which the *Integrity Protection Indication* IE is set to "required" as specified in TS 33.501 [28]. If either the S-NG-RAN node or the M-NG-RAN node is an ng-eNB, the S-NG-RAN node shall behave according to clause 6.10.4 of TS 33.501 [28] for PDU sessions for which the *Integrity Protection Indication* IE is set to "preferred".

The S-NG-RAN node may include the *Location Information at S-NODE* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, if respective information is available at the S-NG-RAN node.

If the *Location Information at S-NODE Reporting* IE set to "pscell" is included in the S-NODE ADDITION REQUEST, the S-NG-RAN node shall, start providing information about the current location of the UE. If the *Location Information at S-NODE* IE is included in the S-NODE ADDITION REQUEST ACKNOWLEDGE, the M-NG-RAN node shall store the included information so that it may be transferred towards the AMF.

If the *Default DRB Allowed* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message and set to "true", the S-NG-RAN node may configure the default DRB for the PDU session.

If the S-NODE ADDITION REQUEST ACKNOWLEDGE message includes the *DRB IDs taken into use* IE, the M-NG-RAN node, if applicable, shall act as specified in TS 37.340 [8].

If *Trace Activation* IE has previously been received for this UE, it shall be included in the S-NODE ADDITION REQUEST message. If the *Trace Activation* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, initiate the requested trace function as described in TS 32.422 [23].

If the *Requested Fast MCG recovery via SRB3* IE set to "true" is included in the S-NODE ADDITION REQUEST message and the S-NG-RAN node decides to configure fast MCG link recovery via SRB3 as specified in TS 37.340 [8], the S-NG-RAN shall, if supported, include the *Available fast MCG recovery via SRB3* IE set to "true" in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If the *QoS Monitoring Request* IE is included in the *QoS Flow Level QoS Parameters* IE for a QoS flow contained in the *DRBs To Be Setup List* IE of the *PDU Session Resource Setup Info – MN terminated* IE, the S-NG-RAN node shall, if supported, use it to configure lower layers for the purpose of delay measurement and QoS monitoring as specified in TS 23.501 [7].

For each QoS flow which has been successfully established in the S-NG-RAN node, if the *QoS Monitoring Request* IE was included in the *QoS Flow Level QoS Parameters* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node shall store this information, and, if supported, perform delay measurement and QoS monitoring as specified in TS 23.501 [7]. In case such a QoS flow is included in the *DRBs To Be Setup List* IE of the *PDU Session Resource Setup Response Info – SN terminated* IE, the M-NG-RAN node shall, if supported, use it to configure lower layers for the purpose of delay measurement and QoS monitoring.

If the *Management Based MDT PLMN List* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store the received information 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].

The M-NG-RAN shall, if supported and available in the UE context, include the *Management Based MDT PLMN List* IE in the S-NODE ADDITION REQUEST message.

### 8.3.X Cell Traffic Trace

#### 8.3.X.1 General

The purpose of the Cell Traffic Trace procedure is to send the allocated Trace Recording Session Reference and the Trace Reference to the M-NG-RAN. The procedure uses UE-associated signalling.

#### 8.3.X.2 Successful Operation



Figure 8.3.X-1: Cell Traffic Trace procedure. Successful operation.

The procedure is initiated with a CELL TRAFFIC TRACE message sent from the S-NG-RAN node to the M-NG-RAN node.

If the *Privacy Indicator* IE is included in the message, the M-NG-RAN node shall take the information into account for anonymisation of MDT data as specified in TS 32.422 [23].

#### 9.1.2.1 S-NODE ADDITION REQUEST

This message is sent by the M-NG-RAN node to the S-NG-RAN node to request the preparation of resources for dual connectivity operation for a specific UE.

Direction: M-NG-RAN node → S-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 |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID 9.2.3.16 | Allocated at the M-NG-RAN node | YES | reject |
| UE Security Capabilities | M |  | 9.2.3.49 |  | YES | reject |
| S-NG-RAN node Security Key | M |  | 9.2.3.51 |  | YES | reject |
| S-NG-RAN node UE Aggregate Maximum Bit Rate | M |  | UE Aggregate Maximum Bit Rate  9.2.3.17 | The UE Aggregate Maximum Bit Rate is split into M-NG-RAN node UE Aggregate Maximum Bit Rate and S-NG-RAN node UE Aggregate Maximum Bit Rate which are enforced by M-NG-RAN node and S-NG-RAN node respectively. | YES | reject |
| Selected PLMN | O |  | PLMN Identity  9.2.2.4 | The selected PLMN of the SCG in the S-NG-RAN node. | YES | ignore |
| Mobility Restriction List | O |  | 9.2.3.53 |  | YES | ignore |
| Index to RAT/Frequency Selection Priority | O |  | 9.2.3.23 |  | YES | reject |
| **PDU Session Resources To Be Added List** |  | *1* |  |  | YES | reject |
| **>PDU Session Resources To Be Added Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Setup Info – SN terminated* IE  nor the  *PDU Session Resource Setup Info – MN terminated* IE is present in a *PDU Session Resources To Be Added Item* IE, abnormal conditions as specified in clause 8.3.1.4 apply. | – |  |
| >>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>S-NSSAI | M |  | 9.2.3.21 |  | – |  |
| >>S-NG-RAN node PDU Session Aggregate Maximum Bit Rate | O |  | PDU Session Aggregate Maximum Bit Rate 9.2.3.69 |  | – |  |
| >>PDU Session Resource Setup Info – SN terminated | O |  | 9.2.1.5 |  | – |  |
| >>PDU Session Resource Setup Info – MN terminated | O |  | 9.2.1.7 |  | – |  |
| M-NG-RAN node to S-NG-RAN node Container | M |  | OCTET STRING | Includes the *CG-ConfigInfo* message as defined in subclause 11.2.2 of TS 38.331 [10] | YES | reject |
| S-NG-RAN node UE XnAP ID | O |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | reject |
| Expected UE Behaviour | O |  | 9.2.3.81 |  | YES | ignore |
| Requested Split SRBs | O |  | ENUMERATED (srb1, srb2, srb1&2, ...) | Indicates that resources for Split SRBs are requested. | YES | reject |
| PCell ID | O |  | Global NG-RAN Cell Identity  9.2.2.27 |  | YES | reject |
| Desired Activity Notification Level | O |  | 9.2.3.77 |  | YES | ignore |
| Available DRB IDs | C-ifSNterminated |  | DRB List  9.2.1.29 | Indicates the list of DRB IDs that the S-NG-RAN node may use for SN-terminated bearers. | YES | reject |
| S-NG-RAN node Maximum Integrity Protected Data Rate Uplink | O |  | Bit Rate  9.2.3.4 | The S-NG-RAN node Maximum Integrity Protected Data Rate Uplink is a portion of the UE’s Maximum Integrity Protected Data Rate in the Uplink, which is enforced by the S-NG-RAN node for the UE’s SN terminated PDU sessions. If the *S-NG-RAN node Maximum Integrity Protected Data Rate Downlink* IE is not present, this IE applies to both UL and DL. | YES | reject |
| S-NG-RAN node Maximum Integrity Protected Data Rate Downlink | O |  | Bit Rate  9.2.3.4 | The S-NG-RAN node Maximum Integrity Protected Data Rate Downlink is a portion of the UE’s Maximum Integrity Protected Data Rate in the Downlink, which is enforced by the S-NG-RAN node for the UE’s SN terminated PDU sessions. | YES | reject |
| Location Information at S-NODE reporting | O |  | ENUMERATED (pscell, ...) | Indicates that the user’s Location Information at S-NODE is to be provided. | YES | ignore |
| MR-DC Resource Coordination Information | O |  | 9.2.2.33 | Information used to coordinate resource utilisation between M-NG-RAN node and S-NG-RAN node. | YES | ignore |
| Masked IMEISV | O |  | 9.2.3.32 |  | YES | ignore |
| NE-DC TDM Pattern | O |  | 9.2.2.38 |  | YES | ignore |
| SN Addition Trigger Indication | O |  | ENUMERATED (SN change, inter-MN HO, intra-MN HO, ...) | This IE indicates the trigger for S-NG-RAN node Addition Preparation procedure | YES | reject |
| Trace Activation | O |  | 9.2.3.55 |  | YES | ignore |
| Requested Fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | Indicates that the resources for fast MCG recovery via SRB3 are requested. | YES | ignore |
| UE Radio Capability ID | O |  | 9.2.3.138 |  | YES | reject |
| Management Based MDT PLMN List | O |  | MDT PLMN List  9.2.3.133 |  |  |  |

### 9.1.2.x CELL TRAFFIC TRACE

This message is sent by S-NG-RAN to transfer the trace information to the M-NG-RAN.

Direction: S-NG-RAN → M-NG-RAN

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Message Type | M |  | 9.2.3.1 |  | YES | ignore |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the M-NG-RAN node | YES | reject |
| S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | reject |
| NG-RAN Trace ID | M |  | OCTET STRING (SIZE(8)) | As per NG-RAN Trace ID in *Trace Activation* IE | YES | ignore |
| Trace Collection Entity IP Address | M |  | Transport Layer Address  9.2.3.29 | For File based Reporting.  Defined in TS 32.422 [23]  Should be ignored if the *Trace Collection Entity* URI IE is present. | – |  |
| Privacy Indicator | O |  | ENUMERATED (Immediate MDT, ...) |  | YES | ignore |
| Trace Collection Entity URI | O |  | URI  9.2.3.124 | For Streaming based Reporting.  Defined in TS 32.422 [23]  Replaces Trace Collection Entity IP Address if present | YES | ignore |

*End of the last change*