**3GPP TSG-RAN WG3 Meeting #127bis *R3-251654***

**Wuhan, China, 7 – 11 Avril, 2025**

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| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.413** | **CR** | **1266** | **rev** | **1** | **Current version:** | **18.5.0** |  |
|  |
| *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)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

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|  |
| ***Title:***  | Trace Depth for Vendor Specific Trace Record |
|  |  |
| ***Source to WG:*** | Nokia, Ericsson, Huawei, ZTE Corporation |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | TEI19 |  | ***Date:*** | 2025-04-07 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-19 |
|  | *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:*** | In S5-250077, SA5 agreed to add 3 new codepoints for the Trace Depth parameter for Trace Session level, better support vendor-defined content in a consistent manner. In XnAP, the existing *Trace Depth* IE contained in the *Trace Activation* IE needs to be updated to introduce these new codepoints, namely:* MinimumOnlyVendorSpecificTraceRecord
* MediumOnlyVendorSpecificTraceRecord
* MaximumOnlyVendorSpecificTraceRecord
 |
|  |  |
| ***Summary of change:*** | Add 3 new codepoints to the *Trace Depth* IE:* MinimumOnlyVendorSpecificTraceRecord
* MediumOnlyVendorSpecificTraceRecord
* MaximumOnlyVendorSpecificTraceRecord
 |
|  |  |
| ***Consequences if not approved:*** | The new vendor specific Trace Depth introduced by SA5 will not be supported in NG-RAN. |
|  |  |
| ***Clauses affected:*** | 9.3.1.14, 9.4.5 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 38.423 CR1485, TS 37.483 CR0169, TS 38.473 CR1564 |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

#### 9.3.1.14 Trace Activation

This IE defines parameters related to a trace session activation.

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| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| NG-RAN Trace ID | M |  | OCTET STRING (SIZE(8)) | This IE is composed of the following: Trace Reference defined in TS 32.422 [11] (leftmost 6 octets, with PLMN information encoded as in 9.3.3.5), andTrace Recording Session Reference defined in TS 32.422 [11] (last 2 octets). | - |  |
| Interfaces to Trace | M |  | BIT STRING (SIZE(8)) | Each position in the bitmap represents an NG-RAN node interface:first bit = NG-C, second bit = Xn-C, third bit = Uu, fourth bit = F1-C, fifth bit = E1:other bits reserved for future use. Value '1' indicates 'should be traced'. Value '0' indicates 'should not be traced'. | - |  |
| Trace Depth | M |  | ENUMERATED (minimum, medium, maximum, minimumWithoutVendorSpecificExtension,mediumWithoutVendorSpecificExtension,maximumWithoutVendorSpecificExtension, …, minimumOnlyVendorSpecificTraceRecord, mediumOnlyVendorSpecificTraceRecord, maximumOnlyVendorSpecificTraceRecord) | Defined in TS 32.422 [11]. | - |  |
| Trace Collection Entity IP Address | M |  | Transport Layer Address9.3.2.4 | For File based Reporting. Defined in TS 32.422 [11].This IE is ignored if the *Trace Collection Entity URI* IE is present. | - |  |
| MDT Configuration | O |  | 9.3.1.167 |  | YES | ignore |
| Trace Collection Entity URI | O |  | URI9.3.2.14 | For Streaming based Reporting.Defined in TS 32.422 [11]. | YES | ignore |

### 9.4.5 Information Element Definitions

<<< skip unchanged ASN.1 >>>

TraceActivation ::= SEQUENCE {

 nGRANTraceID NGRANTraceID,

 interfacesToTrace InterfacesToTrace,

 traceDepth TraceDepth,

 traceCollectionEntityIPAddress TransportLayerAddress,

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

 ...

}

TraceActivation-ExtIEs NGAP-PROTOCOL-EXTENSION ::= {

 { ID id-MDTConfiguration CRITICALITY ignore EXTENSION MDT-Configuration PRESENCE optional }|

 { ID id-TraceCollectionEntityURI CRITICALITY ignore EXTENSION URI-address PRESENCE optional },

 ...

}

TraceDepth ::= ENUMERATED {

 minimum,

 medium,

 maximum,

 minimumWithoutVendorSpecificExtension,

 mediumWithoutVendorSpecificExtension,

 maximumWithoutVendorSpecificExtension,

 ...,

 minimumOnlyVendorSpecificTraceRecord,

 mediumOnlyVendorSpecificTraceRecord,

 maximumOnlyVendorSpecificTraceRecord

}

TrafficLoadReductionIndication ::= INTEGER (1..99)

TransportLayerAddress ::= BIT STRING (SIZE(1..160, ...))