**3GPP TSG-SA5 Meeting #155 *S5-242380r1***

Jeju, South Korea, 27 – 31 May 2024

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.622** | **CR** | **0364** | **rev** | **1** | **Current version:** | **17.9.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | R17 CR 28.622 Trace Report Format Correction | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2024-05-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | A |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | File based trace reporting description is specified for 5G and pre-5G. Streaming based trace reporting description is added in R16 for 5G. It is specified that at NG-RAN activation procedure "Trace Collection Entity IP Address for the file-based trace reporting or Trace Reporting Consumer URI for the streaming trace reporting".  In section 5.9 Trace Collection Entity (TCE) IP Address "This parameter may be present only if the Trace Reporting MnS Consumer URI parameter is not present."  In section 5.9c Trace Reporting Consumer URI "The parameter may be present only if the IP address of TCE is not present"  The above statement is making a mandatory attribute optional which is not inline with the requirement specified in TS28.622 that “The attributes jobType, traceReference, traceRecordingSessionReference, traceCollectionEntityIPAddress, traceTarget and traceReportingFormat are mandatory for all job types.”  It is also not inline with RAN3 specification that Trace Collection Entity IP Address shall be included in the Trace Avtivation message and Trace Reporting Consumer URI may be included in the Trace Avtivation message. If the Trace Activation IE includes the Trace Reporting Consumer URI IE, the NG-RAN node shall use it as described in TS 32.422 and, if streaming based reporting is supported, ignore the Trace Collection Entity IP Address IE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Making TCE IP address mandatory without condition, adding condition of ignoring TCE IP addess when Trace Reporting Consumer URI is present | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Misaligned with RAN3 specification | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.3.30.2, 4.3.30.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | TS32.422 CR0454/0455/0456 , TS28.622 CR0363/0364/0365 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Revision of S5-242380 | | | | | | | | |

\*\*\* START OF NEXT CHANGE \*\*\*

#### 4.3.30.2 Attributes

The TraceJob IOC includes attributes inherited from Top IOC (defined in clause 4.3.29) and the following attributes:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute Name | S | isReadable | isWritable | isInvariant | isNotifyable |
| jobType | M | T | T | F | T |
| listOfInterfaces | CO | T | T | F | T |
| listOfNETypes | CM | T | T | F | T |
| pLMNTarget | CM | T | T | F | T |
| traceReportingConsumerUri | CM | T | T | F | T |
| traceCollectionEntityIPAddress | M | T | T | F | T |
| traceDepth | CM | T | T | F | T |
| traceReference | M | T | T | F | T |
| jobId | O | T | T | T | T |
| traceReportingFormat | M | T | T | F | T |
| traceTarget | M | T | T | F | T |
| triggeringEvents | CM | T | T | F | T |
| anonymizationOfMDTData | CM | T | T | F | T |
| areaConfigurationForNeighCell | CO | T | T | F | T |
| areaScope | CO | T | T | F | T |
| collectionPeriodRRMLTE | CM | T | T | F | T |
| collectionPeriodM6LTE | CM | T | T | F | T |
| collectionPeriodM7LTE | CM | T | T | F | T |
| collectionPeriodRRMUMTS | CM | T | T | F | T |
| collectionPeriodRRMNR | CM | T | T | F | T |
| collectionPeriodM6NR | CM | T | T | F | T |
| collectionPeriodM7NR | CM | T | T | F | T |
| beamLevelMeasurement | CM | T | T | F | T |
| eventListForEventTriggeredMeasurement | CM | T | T | F | T |
| eventThreshold | CM | T | T | F | T |
| listOfMeasurements | CM | T | T | F | T |
| loggingDuration | CM | T | T | F | T |
| loggingInterval | CM | T | T | F | T |
| eventThresholdL1 | CM | T | T | F | T |
| hysteresisL1 | CM | T | T | F | T |
| timeToTriggerL1 | CM | T | T | F | T |
| mBSFNAreaList | CM | T | T | F | T |
| measurementPeriodLTE | CM | T | T | F | T |
| measurementPeriodUMTS | CM | T | T | F | T |
| measurementQuantity | CM | T | T | F | T |
| eventThresholdUphUMTS | CO | T | T | F | T |
| pLMNList | CO | T | T | F | T |
| positioningMethod | CO | T | T | F | T |
| reportAmount | CM | T | T | F | T |
| reportingTrigger | CM | T | T | F | T |
| reportInterval | CM | T | T | F | T |
| reportType | CM | T | T | F | T |
| sensorInformation | CO | T | T | F | T |
| traceCollectionEntityId | CM | T | T | F | T |
| excessPacketDelayThresholds | CO | T | T | F | T |

\*\*\* START OF NEXT CHANGE \*\*\*

#### 4.3.30.3 Attribute constraints

|  |  |
| --- | --- |
| Name | Definition |
| listOfInterfaces (support qualifier) | This attribute shall be present when jobType includes Trace. |
| listOfNETypes (support qualifier) | This attribute shall be present only for Trace with Signalling Based Activation |
| pLMNTarget (support qualifier) | This attribute shall be present for management based activation when several PLMNs are supported in the RAN. |
| traceReportingConsumerUri (support qualifier) | This attribute shall be present if streaming trace data reporting is supported. |
| traceDepth (support qualifier) | This attribute shall be present when jobType includes Trace. |
| triggeringEvents (support qualifier) | This attribute shall be present when jobType includes Trace. |
| anonymizationOfMDTData (support qualifier) | This attribute shall be present only if MDT is supported and the areaScope attribute is present. This attribute is only applicable for management based activation. |
| areaConfigurationForNeighCell (support qualifier) | This attribute shall be present only if NR MDT is supported and the jobType attribute is set to Logged MDT. |
| areaScope (support qualifier) | This attribute shall be present if MDT is supported. |
| collectionPeriodRRMLTE (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute has any of M2, M3 measurement set in case of LTE. |
| collectionPeriodRRMUMTS (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute has any of M3, M4, M5 measurement set in case of UMTS. |
| eventListForEventTriggeredMeasurement (support qualifier) | This attribute shall be present only if NR MDT is supported and the jobType attribute is set to Logged MDT. |
| eventThreshold (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the reportingTrigger attribute is configured for A2EventReporting in LTE and NR or 1f/1IEventReporting in UMTS. |
| listOfMeasurements (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT. |
| loggingDuration (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Logged MDT or Logged MBSFN MDT. |
| loggingInterval (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Logged MDT or Logged MBSFN MDT. |
| eventThresholdL1 (support qualifier) | This attribute shall be present only if NR MDT is supported and the jobType attribute is set to Logged MDT. |
| hysteresisL1 (support qualifier) | This attribute shall be present only if NR MDT is supported and the jobType attribute is set to Logged MDT. |
| timeToTriggerL1 (support qualifier) | This attribute shall be present only if NR MDT is supported and the jobType attribute is set to Logged MDT. |
| mBSFNAreaList (support qualifier) | This attribute shall be present only if Logged MBSFN MDT is supported and the jobType attribute is set to Logged MBSFN MDT. This is applicable only for eUTRAN. |
| measurementPeriodLTE (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute for LTE has either M4 or M5 measurement set. |
| collectionPeriodM6LTE (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute for LTE has M6 measurement set. |
| collectionPeriodM7LTE (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute for LTE has M7 measurement set. |
| measurementPeriodUMTS (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute for UMTS has M6 or M7 measurements set. |
| collectionPeriodRRMNR (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute has any of M4, M5 measurement set in case of NR. |
| collectionPeriodM6NR (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute has M6 measurement set in case of NR. |
| collectionPeriodM7NR (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute has any of M7 measurement set in case of NR. |
| beamLevelMeasurement (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute has M1 measurement set in case of NR. |
| measurementQuantity (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combined Trace and Immediate MDT and the reportingTrigger parameter is set to event 1F. |
| eventThresholdUphUMTS (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combined Trace and Immediate MDT and the listOfMeasurements attribute has M4 measurement set in case of UMTS. |
| pLMNList (support qualifier) | This attribute shall be present only if MDT is supported, several PLMNs are supported in the RAN and the jobType attribute is set to Logged MDT. |
| positioningMethod (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT. |
| reportAmount (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the reportingTrigger attribute is configured for periodic measurements or event triggered periodic measurements. |
| reportingTrigger (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute is configured for M1 (for UMTS, LTE and NR) or M2 (only for UMTS). |
| reportInterval (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT, the listOfMeasurements attribute is configured for M1 (for UMTS, LTE and NR) or M2 (only for UMTS) and the reportingTrigger is configured for periodic measurements or event triggered periodic measurements. |
| reportType (support qualifier) | This attribute shall be present only if NR MDT is supported and the jobType attribute is set to Logged MDT. |
| sensorInformation (support qualifier) | This attribute shall be present only if NR MDT is supported. |
| traceCollectionEntityId (support qualifier) | This attribute shall be present only if MDT is supported and the jobType attribute is set to Logged MDT. |
| excessPacketDelayThresholds | This attribute shall be present only if MDT is supported and the jobType attribute is set to Immediate MDT or combine Trace and Immediate MDT and the listOfMeasurements attribute is configured for M6 for UL in NR. |

\*\*\* END OF CHANGE \*\*\*