**3GPP TSG-CT WG3 Meeting #134C3-242263**

**Changsha, China, 15 - 19 April, 2024 (revision of C3-242abc)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.122** | **CR** | **0828** | **rev** | **-** | **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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Clarification for the presence conditions of QM parameters and Removal of the EN for QM report | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Nokia, Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | XRM, AIMLsys | | | | |  | ***Date:*** | | | 2024-04-01 |
|  |  | | | |  | |  | | |  |
| ***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 "rttMonReports" attribute was used to report the RTT over two QoS flows, hence the following Editor’s Note can be removed:   Editor’s Note: Whether the rttMonReports attribute is needed or the qosMonReports attribute can be used instead to convey both, packet delay and RTT measurements reports requires further discussion.   * Clarification for the presence conditions of the parameters of QosMonitoringReport needs to be added, then the following Editor’s Note can be removed:   Editor’s Note: The presence conditions of the parameters of QosMonitoringReport are to be consolidated/detailed once all the possible reports are specified. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | * Remove the Editor’s Notes listed above. * Add clarification for the presence conditions of the parameters of QosMonitoringReport. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Errors in the specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.14.2.1.5, 5.14.2.1.8 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not impact the OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

##### 5.14.2.1.5 Type: UserPlaneEventReport

This type represents an event report for user plane. It shall comply with the provisions defined in table 5.14.2.1.5-1.

Table 5.14.2.1.5-1: Definition of the UserPlaneEventReport data type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | Cardinality | Description | Applicability (NOTE 1) |
| event | UserPlaneEvent | 1 | Indicates the event reported by the SCEF. |  |
| accumulatedUsage | AccumulatedUsage | 0..1 | Contains the applicable information corresponding to the event. |  |
| flowIds | array(integer) | 0..N | Identifies the affected flows that were sent during event subscription. It may be omitted when the reported event applies to all the flows sent during the subscription.  (NOTE 2) |  |
| multiModFlows | array(MultiModalFlows) | 0..N | Each element of the array identifies the flow filters for the multi-modal data flows that were sent during event subscription and that are affected by the reported event. It may be omitted when the reported event applies to all the multi-modal data flows sent during the subscription.  (NOTE 2) | MultiMedia |
| appliedQosRef | string | 0..1 | The currently applied QoS reference (or applied individual QoS parameter set, if AltQosWithIndParams\_5G is supported). Applicable for event QOS\_NOT\_GUARANTEED or SUCCESSFUL\_RESOURCES\_ALLOCATION.  When it is omitted and the "event" attribute is QOS\_NOT\_GUARANTEED, the event report indicates that the lowest priority alternative QoS profile could not be fulfilled either. | AlternativeQoS\_5G, AltQosWithIndParams\_5G |
| altQosNotSuppInd | boolean | 0..1 | It may be set to true when the "event" attribute is QOS\_NOT\_GUARANTEED to indicate that alternative service requirements are not supported by the access network. The default value false shall apply if the attribute is not present. | AltQoSProfilesSupportReport, GMEC\_5G |
| plmnId | PlmnIdNid | 0..1 | PLMN Identifier or the SNPN Identifier.  It may be present when the reported event is "PLMN\_CHG" and which is allowed to be exposured to the AF based on the local policy or local configuration. | enNB\_5G, GMEC\_5G |
| qosMonReports | array(QosMonitoringReport) | 0..N | Contains the QoS Monitoring Reporting information.  Only the "ulDelays", "ulDelays" and/or "rtDelays" attributes, or if the feature "PacketDelayFailureReport" is supported, the "pdmf" attribute in QosMonitoringReport may be present. | QoSMonitoring\_5G, GMEC\_5G |
| pdvMonReports | array(PdvMonitoringReport) | 0..N | Contains the PDV Monitoring Reporting information.  (NOTE 3) | EnQoSMon, GMEC\_5G |
| ratType | RatType | 0..1 | RAT type may be present if applicable, when the notified event is "ACCESS\_TYPE\_CHANGE" and which is allowed to be exposured to the AF based on the local policy or local configuration. | enNB\_5G, GMEC\_5G |
| batOffsetInfo | BatOffsetInfo | 0..1 | The BAT offset and the optionally adjusted periodicity. | EnTSCAC |
| aggrDataRateRpts | array(QosMonitoringReport) | 0..1 | Contains QoS Monitoring for aggregated data rate reporting information. It shall be present when the notified event is "QOS\_MONITORING" and data rate measurements are available.  Only the "ulAggrDataRate" and/or "dlAggrDataRate" attributes in QosMonitoringReport may be present. | ListUE\_5G, GMEC\_5G |
| rttMonReports | array(QosMonitoringReport) | 0..N | Round-Trip delay for the indicated UL and DL QoS flows. It shall be present when the notified event is "RT\_DELAY\_TWO\_QOS\_FLOWS".  Only the "rtDelays" attributes in QosMonitoringReport may be present. | EnQoSMon, GMEC\_5G |
| qosMonDatRateReps | array(QosMonitoringReport) | 0..1 | Contains QoS Monitoring for data rate reporting information. It shall be present when the notified event is "QOS\_MONITORING" and data rate measurements are available.  Only the "ulDataRate" and/or "dlDataRate" attributes in QosMonitoringReport may be present. | EnQoSMon, GMEC\_5G |
| qosMonConInfoReps | array(QosMonitoringReport) | 0..N | Contains QoS Monitoring for congestion information (ECN marking percentage). It shall be present when the notified event is "QOS\_MONITORING" and congestion measurements are available.  Only the "ulConInfo" and/or "dlConInfo" attributes in QosMonitoringReport may be present. | EnQoSMon, GMEC\_5G |
| NOTE 1: Properties marked with a feature as defined in clause 5.14.4 are applicable as described in clause 5.2.7. If no features are indicated, the related property applies for all the features.  NOTE 2: The attributes "flowIds" and "multiModFlows" are mutually exclusive.  NOTE 3: The PdvMonitoringReport data type does not include the "flows" attribute in this API. | | | | |

\*\*\* 2nd Change \*\*\*

##### 5.14.2.1.8 Type: QosMonitoringReport

Table 5.14.2.1.8-1: Definition of type QosMonitoringReport

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | Cardinality | Description | Applicability |
| ulDelays | array(Uinteger) | 0..N | Uplink packet delay in units of milliseconds. (NOTE 1) |  |
| dlDelays | array(Uinteger) | 0..N | Downlink packet delay in units of milliseconds. (NOTE 1) |  |
| rtDelays | array(Uinteger) | 0..N | Round trip delay in units of milliseconds. (NOTE 1) |  |
| pdmf | boolean | 0..1 | Packet delay measurement failure indicator. When set to true, it indicates that a packet delay failure has occurred.  Default value is false if omitted. (NOTE 2) | PacketDelayFailureReport, GMEC\_5G |
| ulDataRate | BitRate | 0..1 | UL data rate.  (NOTE 3) | EnQoSMon, GMEC\_5G |
| dlDataRate | BitRate | 0..1 | DL data rate.  (NOTE 3) | EnQoSMon, GMEC\_5G |
| ulAggrDataRate | BitRate | 0..1 | Indicates the uplink aggregated Data Rate for the applicable list of UEs provided by AF. | ListUE\_5G |
| dlAggrDataRate | BitRate | 0..1 | Indicates the downlink aggregated Data Rate for the applicable list of UEs provided by AF. | ListUE\_5G |
| ulConInfo | Uinteger | 0..1 | Uplink congestion information, i.e., percentage of ECN marked packets for the UL. | EnQoSMon, GMEC\_5G |
| dlConInfo | Uinteger | 0..1 | Downlink congestion information, i.e., percentage of ECN marked packets for the DL. | EnQoSMon, GMEC\_5G |
| NOTE 1: In this release of the specification one element may be included in the array as difined in clause 4.4.9 in TS 29.522 [62].  NOTE 2: When the "pdmf" attribute is set to true, "ulDelays", "dlDelays" and "rtDelays" and when the feature "EnQoSMon" is supported, "ulDataRate" and "dlDataRate" shall not be present.  NOTE 3: When the "ulDataRate" and/or the "dlDataRate" attribute are included, the parameters related to packet delay and/or congestion information shall not be present. | | | | |

\*\*\* End of Changes \*\*\*