**3GPP TSG-CT WG4 Meeting #105-eC4-214**

**E-Meeting, 17th – 27th August 2021 revision of C4-214161**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.230** | **CR** | **0690** | **rev** | **1** | **Current version:** | **16.6.0** |  |
|  | | | | | | | | |
| *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 |  | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | APN Rate Control Status | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16, CIoT | | | | |  | ***Date:*** | | | 2021-08-22 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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:*** | | According to 23.401 (see clause 4.7.7.3) the SCEF may receive (from the MME) the previously stored APN Rate Control Status in a Connection Management Request message. Also, the SCEF may send APN Rate Control Status in a Connection Management Answer message. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | AVP code for APN Rate Control Status AVP and its sub-AVPs are allocated. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Requirements from 23.401 cannot be implemented | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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's revision history:*** | |  | | | | | | | | |

\* \* \* First Change \* \* \* \*

## 7.1 3GPP specific AVP codes

The 3GPP specific AVPs have the Vendor-Specific bit ('V' bit) set in the AVP header and they carry the 3GPP's vendor identifier in the Vendor-ID field of the AVP header. The 3GPP specific AVP codes are presented in the following table.

Table 7.1: 3GPP specific AVP codes

|  |  |  |  |
| --- | --- | --- | --- |
| AVP Code | Attribute Name | Data Type | Specified in the 3GPP TS |
| \*\*\*\*\*\*\*\*\*\*\*part of table not shown for clarity\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* | | | |
| 4300 | Communication-Failure-Information | Grouped | 29.128 [36] |
| 4301 | Cause-Type | Unsigned32 |
| 4302 | S1AP-Cause | Unsigned32 |
| 4303 | RANAP-Cause | Unsigned32 |
| 4304 | GMM-Cause | Unsigned32 |
| 4305 | SM-Cause | Unsigned32 |
| 4306 | Number-of-UE-Per-Location-Configuration | Grouped |
| 4307 | Number-of-UE-Per-Location-Report | Grouped |
| 4308 | UE-Count | Unsigned32 |
| 4309 | BSSGP-Cause | Unsigned32 |
| 4310 | Serving-PLMN-Rate-Control | Grouped |
| 4311 | Uplink-Rate-Limit | Unsigned32 |
| 4312 | Downlink-Rate-Limit | Unsigned32 |
| 4313 | Extended-PCO | OctetString |
| 4314 | Connection-Action | Unsigned32 |
| 4315 | Non-IP-Data | OctetString |
| 4316 | SCEF-Wait-Time | Time |
| 4317 | CMR-Flags | Unsigned32 |
| 4318 | RRC-Cause-Counter | Grouped |
| 4319 | Counter-Value | Unsigned32 |
| 4320 | RRC-Counter-Timestamp | Time |
| 4321 | TDA-Flags | Unsigned32 |
| 4322 | Idle-Status-Indication | Grouped |
| 4323 | Idle-Status-Timestamp | Time |
| 4324 | Active-Time | Unsigned32 |
| 4325 | Reachability-Cause | Unsigned32 |
| 43yy | APN-Rate-Control-Status | Grouped |
| 43y2 | Uplink-Number-Of-Packets-Allowed | Unsigned32 |
| 43y3 | Number-Of-Additional-Exception-Reports | Unsigned32 |
| 43y4 | Downlink-Number-Of-Packets-Allowed | Unsigned32 |
| 43y5 | APN-Rate-Control-Status-Validity-Time | Unsigned64 |
| Note: The AVP codes from 43xx to 4399 are reserved for TS 29.128. | | | |
| \*\*\*\*\*\*\*\*\*\*\*part of table not shown for clarity\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* | | | |

\* \* \* End Of Change \* \* \* \*