**3GPP TSG-CT WG1 Meeting #123-eC1-202795**

**Electronic meeting, 16-24 April 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.501** | **CR** | **1701** | **rev** | **5** | **Current version:** | **16.4.1** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Enhancement on CPSR for CIoT CP data transport | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon, Vodafone, ZTE, China Mobile, China Telecom, CATT | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_CIoT | | | | |  | ***Date:*** | | | 2020-04-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | There is no consesnus on further improvement on the CPSR message coding and hence following two ENs can be removed:  "*Editor's note: Whether other optimizations besides using a new EPD can be used in order to further reduce the message header of the message is FFS.*  *Editor's note: Whether Control plane service type IE can be removed is FFS.*" | | | | | | | | |
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| ***Summary of change:*** | | It proposes to remove two related ENs for CPSR message coding. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | ENs for CPSR message coding remains | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.2.30.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Rev 1 was postponed in CT1#121 Nov. 2019 meeting.  Rev 2 is to keep the Control plane service type IE in the CPSR message coding and to remove to two related ENs.  Rev 3 is to make the Sequence number IE as one octet and to make the ngKSI IE has falf octet.  Rev 4 is resubmission of rev 3 postponed in CT1#122e based on TS 24.501 V16.4.0.  Rev 5 takes out all changes related to enhancement on the CPSR message coding but just to remove EN remained. | | | | | | | | |

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

#### 8.2.30.1 Message definition

The CONTROL PLANE SERVICE REQUEST message is sent by the UE to the AMF when the UE is using 5GS services with control plane CIoT 5GS optimization. See table 8.2.30.1.1.

Message type: CONTROL PLANE SERVICE REQUEST

Significance: dual

Direction: UE to network

Table 8.2.30.1.1: CONTROL PLANE SERVICE REQUEST message content

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| IEI | Information Element | Type/Reference | Presence | Format | Length |
|  | Extended protocol discriminator | Extended protocol discriminator  9.2 | M | V | 1 |
|  | Security header type | Security header type  9.3 | M | V | 1/2 |
|  | Spare half octet | Spare half octet  9.5 | M | V | 1/2 |
|  | Control plane service request message identity | Message type  9.7 | M | V | 1 |
|  | Control plane service type | Control plane service type  9.11.3.18D | M | V | 1/2 |
|  | ngKSI | NAS key set identifier  9.11.3.32 | M | V | 1/2 |
| 6F | CIoT small data container | CIoT small data container  9.11.3.18B | O | TLV | 4-257 |
| 8- | Payload container type | Payload container type  9.11.3.40 | O | TV | 1 |
| 7B | Payload container | Payload container  9.11.3.39 | O | TLV-E | 4-65538 |
| 12 | PDU session ID | PDU session identity 2  9.11.3.41 | C | TV | 2 |
| 50 | PDU session status | PDU session status  9.11.3.44 | O | TLV | 4-34 |
| F- | Release assistance indication | Release assistance indication  9.11.3.46A | O | TV | 1 |
| 40 | Uplink data status | Uplink data status  9.11.3.57 | O | TLV | 4-34 |
| 71 | NAS message container | NAS message container  9.11.3.33 | O | TLV-E | 4-n |
| 24 | Additional information | Additional information  9.11.2.1 | O | TLV | 3-n |

\* \* \* End of Change \* \* \* \*