**3GPP TSG-CT WG3 Meeting #115e C3-212585**

**E-Meeting, 14th April – 23rd April 2021 (Revision of C3-212279)**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **29.561** | **CR** | **0104** | **rev** | **1** | **Current version:** | **16.7.0** |  |
|  |
| *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:***  | Correction to Framed IP |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | 5GS\_Ph1-CT |  | ***Date:*** | 2021-03-22 |
|  |  |  |  |  |
| ***Category:*** | **A** |  | ***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 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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | For 3GPP-PDP-Type, Framed IP are not applicable to other type than IPv4, IPv6 or IPv4v6, e.g. value 4 Non-IP is not applicable upon the allocated IP address used as end point address for PtP tunneling based on UDP/IP, or PGW not performing UE IP address allocation for other SGi PtP tunnelling mechanisms. and for 5GC reusing above descriptions, Framed IP attributes are not applicable to value 5 Unstructured and value 6 Ethernet for the Ethernet PDU Session.Meanwhile when GGSN/PGW decide to request AAA server to allocate UE IP address, with 3GPP-Allocate -IP-Type value 1,2 or 3 included in the initial Access-Request message instead of allocate UE IP address from the local pool, GGSN/PGW cannot include Frame IP in the Access-Request message since UE IP address is not available yet. |
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| ***Summary of change:*** | In the Change-of-Authorization Request message table Note, Adding " If the 3GPP-PDP-Type is IPv4, IPv6 or IPv4v6" as the condition for "Ipv4 address and/or Ipv6 prefix attributes shall be present". |
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| ***Consequences if not approved:*** | Missing the correct condition description in the table Notes, arousing wrong SMF or SMF+PGW-C implementation and interworking problems with the DN-AAA server. |
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| ***Clauses affected:*** | 11.3.2 |
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|  | **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:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

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

### 11.3.2 Change-of-Authorization Request (optionally sent from DN-AAA server to SMF)

Table 11.3.2-1 describes the attributes of the Change-of-Authorization Request message. Other RADIUS attributes may be used as defined in IETF RFC 5176 [27].

Table 11.3.2-1: The attributes of the Change-of-Authorization Request message

| Attr # | Attribute Name | Description | Content | Presence Requirement |
| --- | --- | --- | --- | --- |
| 1 | User-Name | Username provided by the user (extracted from the PCO field received during PDN connection establishment). If no username is available a generic username, configurable on a per DNN basis, shall be present. If the User-Name has been sent in the Access-Accept message, this user-name shall be used in preference to the above | String | Optional |
| 6 | Service-Type | Indicates the type of service for this user. | 17 (Authorize Only) | Optional |
| 8 | Framed-IP-Address | User IPv4 address | Ipv4 | Conditional NOTE 2 |
| 10 | 3GPP-NSAPI | identifies QFI with value range 0-255 in this user session. | UTF-8 encoded character | Optional |
| 30 | Called-Station-Id | Identifier for the target network | DNN (UTF-8 encoded characters) | Optional |
| 31 | Calling-Station-Id | This attribute is the identifier for the UE, and it shall be configurable on a per DNN basis. | MSISDN in international format according to 3GPP TS 23.003 [28], UTF-8 encoded decimal character. (NOTE 5) | Optional |
| 96 | Framed-Interface-Id | User IPv6 Interface Identifier | Ipv6 | ConditionalNOTE 1 NOTE 2 |
| 44 | Acct-Session-Id | User session identifier.  | SMF IP address (IPv4 or IPv6) and Charging-ID concatenated in a UTF-8 encoded hexadecimal characters.(NOTE 6) | Mandatory |
| 79 | EAP-Message | This attribute encapsulates EAP message (as defined in IETF RFC 3748 [6]) exchanged between the SMF and DN-AAA, see IETF RFC 3579 [7] for details. | String | ConditionalNOTE 3 |
| 80 | Message-Authenticator | This attribute includes the message authenticator, see IETF RFC 3579 [7] for details. | String | ConditionalNOTE 3 |
| 97 | Framed-Ipv6-Prefix | User IPv6 prefix | Ipv6 | Conditional NOTE 2 |
| 123 | Delegated-IPv6-Prefix | Delegated IPv6 prefix to the user. | Ipv6 | Conditional NOTE 4 |
| 26/10415 | 3GPP Vendor-Specific | Sub-attributes according clause 11.3, the encoding of this attribute is specified in 3GPP TS 29.061 [5]. | See clause 11.3 | Optional |
| NOTE 1: Included if the prefix alone is not unique for the user. This may be the case, for example, if a static IPv6 address is assigned.NOTE 2: If the 3GPP-PDP-Type is IPv4, IPv6, or IPv4v6, either IPv4 or IPv6 address/prefix attribute shall be present. The IP protocol version for end-user and network may be different.NOTE 3: Shall be present if EAP is used.NOTE 4: The delegated IPv6 prefix shall be present if IPv6 prefix delegation is required from the external DN-AAA server.NOTE 5: There are no leading characters in front of the country code.NOTE 6: If the accounting session is created per QoS flow, Acct-Session-Id may be extended to include the QFI of the QoS flow. |

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