**3GPP TSG-CT WG1 Meeting #136-eC1-223399**

**E-Meeting, 12th – 20th May 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.301** | **CR** | **3752** | **rev** | **-** | **Current version:** | **17.6.0** |  |
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| *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:*** | Correction on C2 Authorization Payload | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SHARP | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
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| ***Work item code:*** | ID\_UAS | | | | |  | ***Date:*** | | | 2022-05-02 |
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| ***Category:*** | **F** |  | | | | | ***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)* | |
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| ***Reason for change:*** | | SA2 agreed to define “C2 Pairing Information”, and related correction in the S2-2203040.  **C2 Pairing Information:** Contains UAV-C Addressing Information which may e.g. include the UAV-C IP Address.  TS 23.401 needs to make alignment.  We propose to correct TS 24.501 with the SA2 agreement. | | | | | | | | |
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| ***Summary of change:*** | | Clarify and correct about C2 Pairing Information. | | | | | | | | |
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| ***Consequences if not approved:*** | | Unclear specification. | | | | | | | | |
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| ***Clauses affected:*** | | 6.4.3.3 | | | | | | | | |
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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:*** | |  | | | | | | | | |

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

#### 6.4.3.3 EPS bearer context modification accepted by the UE

Upon receipt of the MODIFY EPS BEARER CONTEXT REQUEST message, if the UE provided an APN for the establishment of the PDN connection, the UE shall stop timer T3396, if it is running for the APN provided by the UE. If the UE did not provide an APN for the establishment of the PDN connection and the request type was different from "emergency" and from "handover of emergency bearer services", the UE shall stop the timer T3396 associated with no APN if it is running. If the MODIFY EPS BEARER CONTEXT REQUEST message was received for an emergency PDN connection, the UE shall not stop the timer T3396 associated with no APN if it is running. For any case, the UE shall then check the received TFT before taking it into use and send a MODIFY EPS BEARER CONTEXT ACCEPT message to the MME.

If the MODIFY EPS BEARER CONTEXT REQUEST message contains a PTI value other than "no procedure transaction identity assigned" and "reserved" (see 3GPP TS 24.007 [12]), the UE uses the PTI to identify the UE requested bearer resource allocation procedure or the UE requested bearer resource modification procedure to which the EPS bearer context modification is related (see clause 6.5.3 and clause 6.5.4).

If the MODIFY EPS BEARER CONTEXT REQUEST message contains a PTI value other than "no procedure transaction identity assigned" and "reserved" (see 3GPP TS 24.007 [12]) and the PTI is associated to a UE requested bearer resource allocation procedure or a UE requested bearer resource modification procedure, the UE shall release the traffic flow aggregate description associated to the PTI value provided.

If the EPS bearer context that is modified is a GBR bearer and the MODIFY EPS BEARER CONTEXT REQUEST message does not contain the Guaranteed Bit Rate (GBR) and the Maximum Bit Rate (MBR) values for uplink and downlink, the UE shall continue to use the previously received values for the Guaranteed Bit Rate (GBR) and the Maximum Bit Rate (MBR) for the corresponding bearer.

The UE shall use the received TFT to apply mapping of uplink traffic flows to the radio bearer if the TFT contains packet filters for the uplink direction.

If a WLAN offload indication information element is included in the MODIFY EPS BEARER CONTEXT REQUEST message, the UE shall store the WLAN offload acceptability values for this PDN connection and use the E-UTRAN offload acceptability value to determine whether this PDN connection is offloadable to WLAN or not.

If the UE receives an APN rate control parameters container in the protocol configuration options IE or extended protocol configuration options IE in the MODIFY EPS BEARER CONTEXT REQUEST message, the UE shall store the APN rate control parameters value and use the stored APN rate control parameters value as the maximum allowed limit of uplink user data related to the corresponding APN in accordance with 3GPP TS 23.401 [10]. If the UE has a previously stored APN rate control parameters value for this APN, the UE shall replace the stored APN rate control parameters value for this APN with the received APN rate control parameters value.

If the UE receives an additional APN rate control parameters for exception data container in the protocol configuration options IE or extended protocol configuration options IE in the MODIFY EPS BEARER CONTEXT REQUEST message, the UE shall store the additional APN rate control parameters for exception data value and use the stored additional APN rate control parameters for exception data value as the maximum allowed limit of uplink exception data related to the corresponding APN in accordance with 3GPP TS 23.401 [10]. If the UE has a previously stored additional APN rate control parameters for exception data value for this APN, the UE shall replace the stored additional APN rate control parameters for exception data value for this APN with the received additional APN rate control parameters for exception data value.

If the UE receives a small data rate control parameters container in the protocol configuration options IE or the extended protocol configuration options IE in the MODIFY EPS BEARER CONTEXT REQUEST message, the UE shall store the small data rate control parameters value and use the stored small data rate control parameters value as the maximum allowed limit of uplink user data for the corresponding PDU session that becomes transferred after inter-system change from S1 mode to N1 mode in accordance with 3GPP TS 23.501 [58]. If the UE has a previously stored small data rate control parameters value for this PDU session, the UE shall replace the stored small data rate control parameters value for this PDU Session with the received small data rate control parameters value.

If the UE receives an additional small data rate control parameters for exception data container in the protocol configuration options IE or the extended protocol configuration options IE in the MODIFY EPS BEARER CONTEXT REQUEST message, the UE shall store the additional small data rate control parameters for exception data value and use the stored additional small data rate control parameters for exception data value as the maximum allowed limit of uplink exception data for the corresponding PDU session that becomes transferred after inter-system change from S1 mode to N1 mode in accordance with 3GPP TS 23.501 [58]. If the UE has a previously stored additional small data rate control parameters for exception data value for this PDU session, the UE shall replace the stored additional small data rate control parameters for exception data value for this PDU session with the received additional small data rate control parameters for exception data value.

Upon receipt of the MODIFY EPS BEARER CONTEXT REQUEST message with a session-AMBR and QoS rule(s) in the protocol configuration options IE or the extended protocol configuration options IE, the UE stores the session-AMBR and QoS rule(s) for use during inter-system change from S1 mode to N1 mode.

If the UE receives the MODIFY EPS BEARER CONTEXT REQUEST message containing the Uplink data allowed parameter in the extended protocol configuration options IE, then the UE may start transmitting uplink user data over EPS bearer context(s) of the corresponding PDN connection. The MODIFY EPS BEARER CONTEXT REQUEST message as a part of authorization procedure for the C2 communication, can include an extended protocol configuration options IE containing the service-level-AA container with the length of two octets. The service-level-AA container with the length of two octets:

a) contains the service-level-AA response with the C2AR bits set to the C2 authorization result informed by the UAS NF;

b) can contain service-level-AA payload parameter set to the C2 authorization payload and the service-level-AA payload type parameter set to "C2 authorization payload"; and

c) can contain the service-level device ID with the value set to a new CAA-level UAV ID.

NOTE: The C2 authorization payload in the service-level-AA payload can include the C2 pairing information and the C2 session security information.

Upon receipt of the MODIFY EPS BEARER CONTEXT REQUEST message, if the service-level-AA container with the length of two octets is included in the extended protocol configuration options IE, the UE shall forward the contents of the service-level-AA container with the length of two octets to the upper layers.

If the EPS bearer context being modified is associated with a PDN connection for UAS services, the MODIFY EPS BEARER CONTEXT REQUEST message includes the extended protocol configuration options IE containing the service-level-AA container with the length of two octets containing the service-level-AA response parameter with the SLAR bit set to "Service level authentication and authorization was successful", the UE supporting UAS services:

a) shall consider the UUAA procedure as successfully completed and provide the service-level-AA response to the upper layers;

b) if the service-level-AA container with the length of two octets contains the service-level device ID parameter carrying a CAA-level UAV ID, shall provide the CAA-level UAV ID to the upper layers; and

c) if the service-level-AA container with the length of two octets contains the service-level-AA payload type parameter with the value "UUAA payload" and the service-level-AA payload parameter carrying the UUAA payload, shall provide the UUAA payload to the upper layers.

If the EPS bearer context being modified is associated with a PDN connection for UAS services, the MODIFY EPS BEARER CONTEXT REQUEST message includes the extended protocol configuration options IE containing the service-level-AA container with the length of two octets which:

- contains the service-level-AA payload parameter; and

- does not contain the service-level-AA response parameter;

then the UE supporting UAS services shall provide the service-level-AA payload to the upper layers. Upon reception of a service-level-AA payload from the upper layers, the UE supporting UAS services shall include the extended protocol configuration options IE in the MODIFY EPS BEARER CONTEXT ACCEPT message. In the extended protocol configuration options IE, the UE shall include the service-level-AA container with the length of two octets. In the service-level-AA container with the length of two octets, the UE shall include the service-level-AA payload parameter set to the service-level-AA payload received from the upper layers.

The MODIFY EPS BEARER CONTEXT REQUEST message may include an extended protocol configuration options IE containing the ATSSS response with the length of two octets PCO parameter. If the UE receives an ATSSS response with the length of two octets PCO parameter in the extended protocol configuration options IE of the MODIFY EPS BEARER CONTEXT REQUEST message, the PDN connection associated with the EPS bearer context is established as a user-plane resource of an MA PDU session and the Measurement assistance information indicator is set to "Measurement assistance information length field and the measurement assistance information field included", the UE shall replace the stored Measurement assistance information with the received Measurement assistance information.

Upon receipt of the MODIFY EPS BEARER CONTEXT ACCEPT message, the MME shall stop the timer T3486 and enter the state BEARER CONTEXT ACTIVE.

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