**3GPP TSG-CT WG1 Meeting #133e-bisC1-22XXXX**

**E-meeting, 17-21 January 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **24.301** | **CR** | **3660** | **rev** | **1** | **Current version:** | **17.5.0** |  |
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| *For* [***HELP***](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:***  | ATSSS parameters provisioned and modified through EPS procedure - 24301 Part |
|  |  |
| ***Source to WG:*** | Mediatek Inc. |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | ATSSS\_Ph2 |  | ***Date:*** | 2022-01-18 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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 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: | Enable the network to update ATSSS parameters by EPS modification procedure. |
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| ***Summary of change:*** | Enable the network to update ATSSS parameters by EPS modification procedure. |
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| ***Consequences if not approved:*** | Network is not able to update ATSSS parameters by EPS modification procedure. |
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| ***Clauses affected:*** | 6.4.3.1, 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:*** |  |

\*\*\*\*\* change \*\*\*\*\*

#### 6.4.3.1 General

The purpose of the EPS bearer context modification procedure is to modify an EPS bearer context with a specific QoS and TFT, or re-negotiate header compression configuration associated to an EPS bearer context. The EPS bearer context modification procedure is initiated by the network, but it may also be initiated as part of the UE requested bearer resource allocation procedure or the UE requested bearer resource modification procedure.

The network may also initiate the EPS bearer context modification procedure to update the Measurement Assistance Information. See 3GPP TS 24.193 [XX] clause 4.4.

The network may also initiate the EPS bearer context modification procedure to update the APN-AMBR of the UE, for instance after an inter-system handover. See 3GPP TS 23.401 [10] annex E.

The MME may also initiate the EPS bearer context modification procedure to update the WLAN offload indication to the UE, for instance after the MME received an updated WLAN offload indication of a PDN Connection from HSS. See 3GPP TS 23.401 [10] clause 4.3.23.

The MME may also initiate the EPS bearer context modification procedure to update information required for inter-system change from S1 mode to N1 mode (e.g. session-AMBR, QoS rule(s)). See 3GPP TS 24.501 [54].

The network may initiate the EPS bearer context modification procedure together with the completion of the service request procedure.

\*\*\*\*\* 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.

The MODIFY EPS BEARER CONTEXT REQUEST message can include an extended protocol configuration options IE containing the C2 aviation container with the length of two octets (or service-level AA container with the length of two octets). The C2 aviation container with the length of two octets (or service-level AA container with the length of two octets):

- contains C2 authorization result;

- can contain C2 session security information;

- can contain a new CAA-level UAV ID; and

- can contain the flight authorization information.

If the C2 aviation container with the length of two octets (or service-level AA container with the length of two octets) contains a CAA-level UAV ID, the UE supporting UAS services, shall replace its currently stored CAA-level UAV ID with the new CAA-level UAV ID.

Editor's note: Whether the new C2 aviation container with the length of two octets is adopted for C2 authorization or the service-level AA container with the length of two octets is re-used, is FFS.

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 change \*\*\*\*\*