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

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

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.193** | **CR** | **0071** | **rev** | **1** | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Clarification on establishing PDN leg | | | | | | | | | |
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| ***Source to WG:*** | Mediatek Inc. | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | ATSSS\_Ph2 | | | | |  | ***Date:*** | | | 2022-01-18 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | ESM cause 50/51 should be mapped to 5GSM cause 50/51 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | ESM cause 50/51 should be mapped to 5GSM cause 50/51 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | ESM cause 50/51 is not mapped to 5GSM cause 50/51 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.3.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

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

### 5.3.1 UE establishing a PDN connection as a user-plane resource of an MA PDU session to be established

In order to establish a PDN connection as a user-plane resource of an MA PDU session to be established, the UE shall initiate the UE requested PDN connectivity procedure according to 3GPP TS 24.301 [10].

In the PDN CONNECTIVITY REQUEST message or, when applicable, in the ESM INFORMATION RESPONSE message, of the UE requested PDN connectivity procedure:

a) the UE shall set the request type to "initial request" as specified in 3GPP TS 24.301 [10];

NOTE: According to 3GPP TS 24.301 [10], a newly generated PDU session ID is included in the protocol configuration options IE or the extended protocol configuration options IE of the PDN CONNECTIVITY REQUEST message with the request type "initial request".

b) the UE shall set the PDN Type IE to "IPv4", "IPv6", "IPv4v6" or "Ethernet"; and

c) in the protocol configuration options or extended protocol configuration options IE of the PDN CONNECTIVITY REQUEST message, the UE shall include the ATSSS request PCO parameter. In the ATSSS request PCO parameter:

1) if the UE supports ATSSS Low-Layer functionality with any steering mode as specified in clause 5.32.6 of 3GPP TS 23.501 [2], the UE shall set the ATSSS-ST field to "ATSSS Low-Layer functionality with any steering mode supported";

2) if the UE supports MPTCP functionality with any steering mode and ATSSS-LL functionality with only active-standby steering mode as specified in clause 5.32.6 of 3GPP TS 23.501 [2], the UE shall set the ATSSS-ST field to "MPTCP functionality with any steering mode and ATSSS-LL functionality with only active-standby steering mode supported"; or

3) if the UE supports MPTCP functionality with any steering mode and ATSSS-LL functionality with any steering mode as specified in clause 5.32.6 of 3GPP TS 23.501 [2], the UE shall set the ATSSS-ST field to "MPTCP functionality with any steering mode and ATSSS-LL functionality with any steering mode supported".

Upon receipt of an ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST message of a default EPS bearer context activation procedure as a response to the PDN CONNECTIVITY REQUEST message as specified in 3GPP TS 24.301 [10], the ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST message containing the extended protocol configuration options IE with the ATSSS response with the length of two octets PCO parameter:

a) the UE shall consider that the MA PDU session is established based on parameters from the default EPS bearer context of the PDN connection, as follows:

1) the PDN type of the default EPS bearer context shall be mapped to the PDU session type of the MA PDU session as follows:

i) if the PDN type is "IPv4", the PDU session type is set to "IPv4";

ii) if the PDN type is "IPv6", the PDU session type is set to "IPv6";

iii) if the PDN type is "IPv4v6", the PDU session type is set to "IPv4v6"; or

iv) if the PDN type is "Ethernet", the PDU session type is set to "Ethernet";

2) the PDN address of the default EPS bearer context shall be mapped to PDU address of the MA PDU session;

3) the APN of the default EPS bearer context shall be mapped to the DNN of the MA PDU session;

4) the PDU session identity of the MA PDU session shall be set to the PDU session identity included by the UE in the Protocol configuration options IE or Extended protocol configuration options IE in the PDN CONNECTIVITY REQUEST message;

5) the S-NSSAI of the MA PDU session shall be set to the S-NSSAI included by the network in the Protocol configuration options IE or Extended protocol configuration options IE in the ACTIVATE DEFAULT EPS BEARER REQUEST message, if the PDN connection is a non-emergency PDN connection;

6) the SSC mode of the MA PDU session shall be set to "SSC mode 1";

7) state of the PDU session shall be set to PDU SESSION ACTIVE; and

X) the ESM cause of the default EPS bearer context, if any, shall be mapped to the 5GSM cause of the MA PDU session as follows:

i) if the ESM cause is #50 "PDN type IPv4 only allowed", the 5GSM cause of the MA PDU session is set to #50 "PDU session type IPv4 only allowed"; or

ii) if the ESM cause is #51 "PDN type IPv6 only allowed", the 5GSM cause of the MA PDU session is set to #51 "PDU session type IPv6 only allowed";

and that the PDN connection is established as a user-plane resource of the MA PDU session;

b) if the network steering functionalities information is included in the ATSSS response with the length of two octets PCO parameter, the UE shall use the network steering functionalities information; and

c) if the measurement assistance information is included in the ATSSS response with the length of two octets PCO parameter, the UE shall use the measurement assistance information.

Upon receipt of:

a) a PDN CONNECTIVITY REJECT message as a response to the PDN CONNECTIVITY REQUEST message as specified in 3GPP TS 24.301 [10]; or

b) an ACTIVATE DEFAULT EPS BEARER CONTEXT REQUEST message of a default EPS bearer context activation procedure as a response to the PDN CONNECTIVITY REQUEST message as specified in 3GPP TS 24.301 [10] without the extended protocol configuration options IE containing the ATSSS response with the length of two octets PCO parameter;

the UE shall consider that the MA PDU session is not established and the PDN connection is not established as a user-plane resource of the MA PDU session.

\*\*\* end of change \*\*\*