**3GPP TSG-CT WG1 Meeting #126-eC1-207018**

**Elbonia,** **13-20 November 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.301** | **CR** | **3423** | **rev** | **3** | **Current version:** | **17.0.0** |  |
|  | | | | | | | | |
| *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:*** |  | | | | | | | | | |
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| ***Source to WG:*** | BackBerry UK Ltd. | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GProtoc17 | | | | |  | ***Date:*** | | | 2020-10-05 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **D** |  | | | | | ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17)* | |
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| ***Reason for change:*** | | Description for #54 in annex B.1 incorrect. | | | | | | | | |
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| ***Summary of change:*** | | Correct the description for #54 in annex B.1. | | | | | | | | |
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| ***Consequences if not approved:*** | | Description for #54 in annex B.1 remains incomplete. | | | | | | | | |
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| ***Clauses affected:*** | | B.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:*** | |  | | | | | | | | |

\*\*\* First change \*\*\*

# B.1 Causes related to nature of request

Cause #8 – Operator Determined Barring

This ESM cause is used by the network to indicate that the requested service was rejected by the MME due to Operator Determined Barring.

Cause #26 – Insufficient resources

This ESM cause is used by the UE or by the network to indicate that the requested service cannot be provided due to insufficient resources.

Cause #27 – Missing or unknown APN

This ESM cause is used by the network to indicate that the requested service was rejected by the external packet data network because the access point name was not included although required or if the access point name could not be resolved.

Cause #28 – Unknown PDN type

This ESM cause is used by the network to indicate that the requested service was rejected by the external packet data network because the PDN type could not be recognised.

Cause #29 – User authentication or authorization failed

This ESM cause is used by the network to indicate that the requested service was rejected by the external packet data network due to a failed user authentication or revoked by the external packet data network.

Cause #30 – Request rejected by Serving GW or PDN GW

This ESM cause is used by the network to indicate that the requested service or operation or the request for a resource was rejected by the Serving GW or PDN GW.

Cause #31 – Request rejected, unspecified

This ESM cause is used by the network or by the UE to indicate that the requested service or operation or the request for a resource was rejected due to unspecified reasons.

Cause #32 – Service option not supported

This ESM cause is used by the network when the UE requests a service which is not supported by the PLMN.

Cause #33 – Requested service option not subscribed

This ESM cause is sent when the UE requests a service option for which it has no subscription.

Cause #34 – Service option temporarily out of order

This ESM cause is sent when the network cannot service the request because of temporary outage of one or more functions required for supporting the service.

Cause #35 – PTI already in use

This ESM cause is used by the network to indicate that the PTI included by the UE is already in use by another active UE requested procedure for this UE.

Cause #36 – Regular deactivation

This ESM cause is used to indicate a regular UE or network initiated release of EPS bearer resources.

Cause #37 – EPS QoS not accepted

This ESM cause is used by the network if the new EPS QoS cannot be accepted that was indicated in the UE request.

Cause #38 – Network failure

This ESM cause is used by the network to indicate that the requested service was rejected due to an error situation in the network.

Cause #39 – Reactivation requested

This ESM cause is used by the network to request a PDN connection reactivation.

Cause #41 – Semantic error in the TFT operation.

This ESM cause is used by the network or the UE to indicate that the requested service was rejected due to a semantic error in the TFT operation included in the request.

Cause #42 – Syntactical error in the TFT operation.

This ESM cause is used by the network or the UE to indicate that the requested service was rejected due to a syntactical error in the TFT operation included in the request.

Cause #43 – Invalid EPS bearer identity

This ESM cause is used by the network or the UE to indicate that the EPS bearer identity value provided to it is not a valid value for the received message or the EPS bearer context identified by the linked EPS bearer identity IE in the request is not active.

Cause #44 – Semantic errors in packet filter(s)

This ESM cause is used by the network or the UE to indicate that the requested service was rejected due to one or more semantic errors in packet filter(s) of the TFT included in the request.

Cause #45 – Syntactical error in packet filter(s)

This ESM cause is used by the network or the UE to indicate that the requested service was rejected due to one or more syntactical errors in packet filter(s) of the TFT included in the request.

Cause #47 – PTI mismatch

This ESM cause is used by the UE to indicate that the PTI value which is included in the ESM message that the UE receives does not match a PTI in use.

Cause #49 – Last PDN disconnection not allowed

This ESM cause is used by the network, in case of EMM-REGISTERED without PDN connection is not supported by the UE or the MME, to indicate that the UE requested PDN disconnection procedure on the last remaining PDN connection is not allowed.

Cause #50 – PDN type IPv4 only allowed

This ESM cause is used by the network to indicate that only PDN type IPv4 is allowed for the requested PDN connectivity.

Cause #51 – PDN type IPv6 only allowed

This ESM cause is used by the network to indicate that only PDN type IPv6 is allowed for the requested PDN connectivity.

Cause #52 – single address bearers only allowed

This ESM cause is used by the network to indicate that the requested PDN connectivity is accepted with the restriction that only single IP version bearers are allowed.

Cause #53 – ESM information not received

This ESM cause is used by the network to indicate that the PDN connectivity procedure was rejected due to the ESM information was not received.

Cause #54 – PDN connection does not exist

This ESM cause is used by the network at handover of a PDN connection from a non-3GPP access network connected to EPC, or at interworking of a PDU session from non-3GPP access network connected to 5GCN or from NG-RAN connected to 5GCN to a PDN connection, to indicate that the MME does not have any information about the requested PDN connection.

Cause #55 – Multiple PDN connections for a given APN not allowed

This ESM cause is used by the network to indicate that the PDN connectivity procedure was rejected due to multiple PDN connections for a given APN are not allowed.

Cause #56 – Collision with network initiated request

This ESM cause is used by the network to indicate that the network has already initiated the activation, modification or deactivation of bearer resources which was requested by the UE.

Cause #57 – PDN type IPv4v6 only allowed

This ESM cause is used by the network to indicate that only PDN types IPv4, IPv6 or IPv4v6 are allowed for the requested PDN connectivity.

Cause #58 – PDN type non IP only allowed

This ESM cause is used by the network to indicate that only PDN type non IP is allowed for the requested PDN connectivity.

Cause #59 – Unsupported QCI value

This ESM cause is used by the network if the QCI indicated in the UE request cannot be supported.

Cause #60 – Bearer handling not supported

This ESM cause is used by the network to indicate that the procedure requested by the UE was rejected because the bearer handling is not supported.

Cause #61 – PDN type Ethernet only allowed

This ESM cause is used by the network to indicate that only PDN type Ethernet is allowed for the requested PDN connectivity.

Cause #65 – Maximum number of EPS bearers reached

This ESM cause is used by the network to indicate that the procedure requested by the UE was rejected as the network has reached the maximum number of simultaneously active EPS bearer contexts for the UE.

Cause #66 – Requested APN not supported in current RAT and PLMN combination

This ESM cause is used by the network to indicate that the procedure requested by the UE was rejected as the requested APN is not supported in the current RAT and PLMN.

Cause #81 – Invalid PTI value

This ESM cause is used by the network or UE to indicate that the PTI provided to it is unassigned or reserved.

Cause #112 – APN restriction value incompatible with active EPS bearer context.

This ESM cause is used by the network to indicate that the EPS bearer context(s) have an APN restriction value that is not allowed in combination with a currently active EPS bearer context. Restriction values are defined in 3GPP TS 23.060 [4].

Cause #113 –Multiple accesses to a PDN connection not allowed

This ESM cause is used by the network to indicate that multiple accesses to a PDN connection for NBIFOM is not allowed.