**3GPP TSG-CT WG1 Meeting #129-eC1-21xxxx**

**Electronic meeting, 19-23 April 2021 *(was C1-212066*)**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
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|  | **24.282** | **CR** | **0216** | **rev** | **-** | **Current version:** | **17.2.0** |  |
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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 |  | Radio Access Network |  | Core Network |  |

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| ***Title:***  | Editorial corrections to recently introduced text |
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| ***Source to WG:*** | AT&T |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | eMCData3 |  | ***Date:*** | 08-04-2021 |
|  |  |  |  |  |
| ***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 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-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:*** | Mis-formatted NOTE at the bottom of 4.12 gets combined with next session heading. References to section 4.9.2 are inconsistent with use in other parts of the specification. Only text introduced in Rel-17 is impacted. |
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| ***Summary of change:*** | Format NOTE in 4.12 correctly. Correct/replace references to 4.9.2. |
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| ***Consequences if not approved:*** | The error impacts the section numbering of the document and uses inconsistent references reducing the readability of the document.  |
|  |  |
| ***Clauses affected:*** | 4.12, 5, 6.2.7.2, 6.2.8.1.4, 6.3.7.1.9 |
|  |  |
|  | **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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* \* \* \* FIRST CHANGE \* \* \* \* \* \*

## 4.12 MCData emergency private communications

MCData emergency private communications refer to emergency one‑to‑one communications. The following MCData emergency private communication functionalities are specified in the present document:

- MCData emergency private communication origination with optional MCData emergency alert initiation;

- upgrade of an MCData private communication to an MCData emergency private; and

- cancellation of the MCData emergency private communication priority.

Key aspects of MCData emergency private communications include:

- adjusted EPS bearer priority for both participants whether or not they are both in an emergency condition (i.e. both have their MCData emergency state set). This is achieved by using the Resource-Priority header field as specified in IETF RFC 4412 [74] with namespaces defined for use by MCPTT specified in IETF RFC 8101 [67];

- the initiator of the MCData emergency private communication can override the other MCData user in the MCData emergency private communication unless that user also has their MCData emergency state set;

- restoration of normal EPS bearer priority to the communication according to system policy (e.g., configured time limit for the emergency priority of an MCData emergency private communication or cancellation of the emergency condition of the private communication);

- requires the MCData user to be authorised to either originate or cancel an MCData emergency private communication;

- requires the targeted MCData user to be authorised to receive an MCData emergency private communication;

- requests to originate MCData emergency private communications may also include an indication of an MCData emergency alert; and

There are a number of states that are key in managing these aspects of MCData emergency private communications, which include:

- **MCData private emergency alert (MDPEA) state**: this is an internal state of the MCData client which in conjunction with the MCData emergency private communication state aids in managing the MCData emergency state and related actions.

- **MCData emergency private communication (MDEPC) state**: this is an internal state managed by the MCData client which in conjunction with the MCData emergency alert state aids in managing the MCData emergency state and related actions.

- **In-progress emergency private communication (IPEPC) state:** indicates whether or not there is an MCData emergency private communication in-progress for the two participants. This state is managed by the controlling MCData function. All private communications originated between these two participants when in an in-progress emergency private communication state are MCData emergency private communications until this state is cancelled, whether or not the originator is in an MCData emergency state.

- **MCData emergency private priority (MDEPP) state:** this is an internal state managed by the MCData client which tracks the in-progress emergency private communication state of the private communication managed by the controlling MCData function. Ideally, the MCData client would not need to track the in-progress emergency private priority state, but doing so enables the MCData client to request MCData emergency-level priority earlier than otherwise possible. For example, if the MCData user wishes to join an MCData emergency private communication and is not in the MCData emergency state, the MCData client should have emergency level priority. If it has knowledge of the in-progress emergency private priority state of the private communication (i.e., the two participants), it can request priority by including a Resource-Priority header field set to the MCPTT namespace specified in IETF RFC 8101 [67], and appropriate priority level in the SIP INVITE request (or SIP re-INVITE request).

NOTE: The above states and their transitions are described in Annex G.

# 5 Functional entities

## 5.1 Introduction

\* \* \* \* \* \* NEXT CHANGE \* \* \* \* \* \*

#### 6.2.7.2 MCData in-progress emergency cancel

This subclause covers both on-demand session and pre-established sessions.

Upon receiving a request from an MCData user to cancel the in-progress emergency condition on a prearranged MCData group, the MCData client shall generate a SIP re-INVITE request while in an ongoing prearranged group communication by following the UE originating session procedures specified in 3GPP TS 24.229 [5], with the clarifications given below, otherwise generate a SIP MESSAGE request by following client procedure of subclause 16.2.1.4 of present document.

The MCData client:

1) if the MCData user is not authorised to cancel the in-progress emergency group state of the MCData group as determined by the procedures of subclause 6.2.8.1.7, the MCData client:

a) should indicate to the MCData user that they are not authorised to cancel the in-progress emergency group state of the MCData group; and

b) shall skip the remaining steps of the current subclause;

2) shall, if the MCData user is cancelling an in-progress emergency condition and optionally an MCData emergency alert originated by the MCData user, include an application/vnd.3gpp.mcdata-info+xml MIME body populated as specified in subclause 6.2.8.1.3;

3) shall, if the MCData user is cancelling an in-progress emergency condition and an MCData emergency alert originated by another MCData user, include an application/vnd.3gpp.mcdata-info+xml MIME body populated as specified in subclause 6.2.8.1.14;

4) shall include in the application/vnd.3gpp.mcdata-info+xml MIME body with the <mcdatainfo> element containing the <mcdata-Params> element:

a) the <session-type> element set to a value of "prearranged"; and

b) the <mcdata-request-uri> element set to the group identity;

NOTE 1: The MCData ID of the originating MCData user is not included in the body, as this will be inserted into the body of the SIP INVITE request that is sent by the originating participating MCData function.

5) shall include the g.3gpp.mcdata media feature tag in the Contact header field of the SIP re-INVITE request according to IETF RFC 3840 [16];

6) if the SIP re-INVITE request is to be sent within an on-demand session, shall include in the SIP re-INVITE request an SDP offer according to 3GPP TS 24.229 [5] with the clarifications specified in subclause 9.2.4.2.1 (for SDS session), or 10.2.5.2.1 (for FD using media plane), as appropriate;

7) if the SIP re-INVITE request is to be sent within a pre-established session, shall include an SDP offer in the SIP re-INVITE request according to 3GPP TS 24.229 [5], based upon the parameters already negotiated for the pre-established session;

NOTE 2: The SIP re-INVITE request can be sent within an on-demand session or a pre-established session. If the SIP re-INVITE request is sent within a pre-established session, the SDP offer for the media parameters is expected to be the same as was negotiated in the existing pre-established session.

8) shall include a Resource-Priority header field and comply with the procedures in subclause 6.2.8.1.2; and

9) shall send the SIP re-INVITE request according to 3GPP TS 24.229 [5].

On receiving a SIP 2xx response to the SIP re-INVITE request, the MCData client:

1) shall interact with the user plane as specified in 3GPP TS 24.582 [15];

2) shall set the MCData emergency group state of the group to "MDEG 1: no-emergency";

3) shall set the MCData emergency group communication state of the group to "MDEGC 1: emergency-gc-capable"; and

4) if the MCData emergency alert state is set to "MDEA 4: Emergency-alert-cancel-pending", the sent SIP re-INVITE request did not contain an <originated-by> element in the application/vnd.3gpp.mcdata-info+xml MIME body and the SIP 2xx response to the SIP request for a priority group communication does not contain a Warning header field as specified in subclause 4.9 with the warning text containing the mcdata-warn-code set to "149", shall set the MCData emergency alert state to "MDEA 1: no-alert".

On receiving a SIP INFO request where the Request-URI contains an MCData session ID identifying an ongoing group session, the MCData client shall follow the actions specified in subclause 6.2.8.1.13.

On receiving a SIP 4xx response, SIP 5xx response or SIP 6xx response to the SIP re-INVITE request:

1) shall set the MCData emergency group state as "MDEG 2: in-progress";

2) if the SIP 4xx response, SIP 5xx response or SIP 6xx response contains an application/vnd.3gpp.mcdata-info+xml MIME body with an <alert-ind> element set to a value of "true" and the sent SIP re-INVITE request did not contain an <originated-by> element in the application/vnd.3gpp.mcdata-info+xml MIME body, the MCData client shall set the MCData emergency alert state to "MDEA 3: emergency-alert-initiated"; and

3) if the SIP 4xx response, SIP 5xx response or SIP 6xx response did not contain an application/vnd.3gpp.mcdata-info+xml MIME body with an <alert-ind> element and did not contain an <originated-by> element, the MCData emergency alert (MDEA) state shall revert to its value prior to entering the current procedure.

NOTE 3: If the in-progress emergency group state cancel request is rejected, the state of the session does not change, i.e. continues with MCData emergency group communication level priority.

\* \* \* \* \* \* NEXT CHANGE \* \* \* \* \* \*

##### 6.2.8.1.4 Receiving a SIP 2xx response to a SIP request for a priority communication

In the procedures in this subclause, a priority group communication refers to an MCData emergency group communication or an MCData imminent peril group communication.

On receiving a SIP 2xx response to a SIP request for a priority group communication, the MCData client:

1) if the MCData emergency group communication state is set to "MDEGC 2: emergency-communication-requested" or "MDEGC 3: emergency-communication-granted":

a) shall set the MCData client emergency group state of the group to "MDEG 2: in-progress";

b) if the MCData emergency alert state is set to "MDEA 2: emergency-alert-confirm-pending" and the SIP 2xx response to the SIP request for a priority group communication does not contain a Warning header field as specified in subclause 4.9 with the warning text containing the mcdata-warn-code set to "149", shall set the MCData emergency alert state to "MDEA 3: emergency-alert-initiated";

c) shall set the MCData emergency group communication state to "MDEGC 3: emergency-communication-granted"; and

d) shall set the MCData imminent peril group communication state to "MDIGC 1: imminent-peril-capable" and the MCData imminent peril group state to "MDIG 1: no-imminent-peril"; or

2) if the MCData imminent peril group communication state is set to "MDIGC 2: imminent-peril-communication-requested" or "MDIGC 3: imminent-peril-communication-granted" and the SIP 2xx response to the SIP request for an imminent peril group communication does not contain a Warning header field as specified in subclause 4.9, with the warning text containing the mcdata-warn-code set to "149":

a) set the MCData imminent peril group communication state to "MDIGC 3: imminent-peril-communication-granted"; and

b) set the MCData imminent peril group state to "MDIG 2: in-progress".

\* \* \* \* \* \* NEXT CHANGE \* \* \* \* \* \*

##### 6.3.7.1.9 Validate priority request parameters

This subclause is referenced from other procedures.

This procedure validates the combinations of <emergency-ind>, <imminentperil-ind> and <alert-ind> in the application/vnd.3gpp.mcdata-info+xml MIME body included in:

1) a SIP INVITE request or SIP re-INVITE request; or

2) the body "URI" header field of the SIP URI included in the application/resource-lists MIME body which is pointed to by a "cid" URL located in the Refer-To header of a SIP REFER request;

Upon receiving a SIP request as specified above with the <emergency-ind> element set to a value of "true", the controlling MCData function shall only consider the following as valid combinations:

1) <imminentperil-ind> not included and <alert-ind> included.

Upon receiving a SIP request as specified above with the <emergency-ind> element set to a value of "false", the controlling MCData function shall only consider the following as valid combinations:

1) <imminentperil-ind> not included and <alert-ind> not included; or

2) <imminentperil-ind> not included and <alert-ind> included.

Upon receiving a SIP request as specified above with the <imminentperil-ind> element included the controlling MCData function shall only consider the request as valid if both the <emergency-ind> and <alert-ind> are not included.

If the combination of the <emergency-ind>, <imminentperil-ind> or <alert-ind> indicators is invalid, the controlling MCData function shall send a SIP 403 (Forbidden) response with the warning text set to "150 invalid combinations of data received in MIME body" in a Warning header field as specified in subclause 4.9.

\* \* \* \* \* \* END CHANGE \* \* \* \* \* \*