**3GPP TSG-CT WG1 Meeting #134-eC1-221199**

**E-meeting, 17-25 February 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.174** | **CR** | **0033** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *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:*** | MO-MMTEL indications towards the lower layer for call pull | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MuDTran | | | | |  | ***Date:*** | | | 2022-02-09 |
|  |  | | | |  | |  | | |  |
| ***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 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:*** | | According to C1-221192, the CR implements the alternative where an access attempt occurred due to a call pull is categorized to an MO MMTEL call. | | | | | | | | |
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| ***Summary of change:*** | | The IMS client provides indications related to MO-MMTEL call to the NAS layer. | | | | | | | | |
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| ***Consequences if not approved:*** | | It is not clear how an access attempt occurred due to a call pull is categorized. | | | | | | | | |
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| ***Clauses affected:*** | | 4.5.3.1.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

##### 4.5.3.1.2 Call pull handling

The UE may pull a session from another federated UE by performing the following steps:

Editor's Note: [WI MuDTran, CR#0030]: It is FFS whether any procedure is needed for the to-be-pulled UE to authorize the call pull.

a) the UE learns about the session to pull by subscribing to the dialog event package, specified in RFC 4235 [16];

b) if:

1) only audio or only real-time text or only both audio and real-time text are offered in the call to be pulled and no other originating multimedia telephony communication session initiated with offering only audio or only real-time text or only both audio and real-time text exists, then the UE sends the MO-MMTEL-voice-started indication to the non-access stratum; or

2) video is offered in the call to be pulled and no other originating multimedia telephony communication session initiated with offering video exists, then the UE sends the MO-MMTEL-video-started indication to the non-access stratum.

The non-access stratum provides the barring result. If the barring result is:

1) "not-barred", the UE continues the rest of the steps below; or

2) "barred", the UE rejects the call pull and skips the rest of steps below;

c) the UE sends an INVITE request towards the far end populated as follows:

1) the Request-URI is set to the uri in the <target> element of the <remote> element;

2) a Replaces header field containing the dialog identifiers contained as attributes in the <dialog> element of the <dialog-info> element; and

3) any other header field or body as determined by the service logic; and

d) when the UE receives a response to the INVITE request above the UE follows general procedures in TS 24.229 [3].

When the pulled call ends (e.g., a response to a BYE or a failure response to the initial INVITE request is transferred, the call is transferred to a different UE):

- if the UE sent the MO-MMTEL-voice-started indication upon initiation of the call pull and no other originating multimedia telephony communication session initiated with offering only audio or only real-time text or only both audio and real-time text exists, the UE sends the MO-MMTEL-voice-ended to the non-access stratum; or

- if the UE sent the MO-MMTEL-video-started indication upon initiation of the call pull and no other originating multimedia telephony communication session initiated with offering video exists, the UE sends the MO-MMTEL-video-ended indication to the non-access stratum.

Annex X (normative):  
IP-Connectivity Access Network specific concepts when using EPS to access IM CN subsystem

# X.1 Scope

The present annex defines IP-CAN specific requirements for a multimedia telephony communication service and associated supplementary services in the IP Multimedia (IM) Core Network (CN) subsystem, where the IP-CAN is Evolved Packet System (EPS).

# X.2 EPS aspects when connected to the IM CN subsystem

## ALT 1: X.2.1 Procedures at the UE

### X.2.1.1 Service specific access control

#### X.2.1.1.1 General

This clause specifies service specific access control in addition to procedures as specified in annex J of 3GPP TS 24.173 [xx].

#### X.2.1.1.2 Call pull specific procedures

When the UE decides to pull a call from another federeted UE, the UE provides a "call-pull-initiated" indication to the lower layers.

## ALT 2: X.2.1 Procedures at the UE

### X.2.1.1 Service specific access control

#### X.2.1.1.1 General

This clause specifies service specific access control in addition to procedures as specified in annex J of 3GPP TS 24.173 [xx].

#### X.2.1.1.2 Call pull specific procedures

When the UE decides to pull a call from another federeted UE:

a) if:

1) only audio or only real-time text or only both audio and real-time text are offered in the call to be pulled and no other originating multimedia telephony communication session initiated with offering only audio or only real-time text or only both audio and real-time text exists, then the UE sends the MO-MMTEL-voice-started indication to the non-access stratum; or

2) video is offered in the call to be pulled and no other originating multimedia telephony communication session initiated with offering video exists, then the UE sends the MO-MMTEL-video-started indication to the non-access stratum.

The non-access stratum provides the barring result. If the barring result is:

1) "not-barred", the UE continues the call pull handling; or

2) "barred", the UE rejects the call pull and stops the call pull procedure.

When the pulled call ends (e.g., a response to a BYE or a failure response to the initial INVITE request is transferred, the call is transferred to a different UE):

- if the UE sent the MO-MMTEL-voice-started indication upon initiation of the call pull and no other originating multimedia telephony communication session initiated with offering only audio or only real-time text or only both audio and real-time text exists, the UE sends the MO-MMTEL-voice-ended to the non-access stratum; or

- if the UE sent the MO-MMTEL-video-started indication upon initiation of the call pull and no other originating multimedia telephony communication session initiated with offering video exists, the UE sends the MO-MMTEL-video-ended indication to the non-access stratum.