**3GPP TSG-CT WG1 Meeting #127bis-eC1-210235**

**Electronic meeting, 25-29 January 2021**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **24.281** | **CR** | **0105** | **rev** | **1** | **Current version:** | **17.1.0** |  |
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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 | **X** |

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| ***Title:***  | Call control - Restricting MCVideo private communications |
|  |  |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | eMONASTERY2 |  | ***Date:*** | 2021-01-11 |
|  |  |  |  |  |
| ***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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)* |
|  |  |
| ***Reason for change:*** | Stage 2 requirements dictate that an MC service user shall only have private communications with those MC service users which are configured, whereas private communications with other MC service users shall not be allowed. For this purpose, two lists of users are introduced, one including the users that a user can call and a second one including the users from which a call can be received.MCVideo stage 3 do not have any of those private communication lists and hence limiting is not supported.In order to support that a user can receive calls from any user, a new option is used to indicate that the list should not be considered and any incoming call should be allowed. |
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| ***Summary of change:*** | 1) Introduction of new warning text “user not authorised to be called by this originating user”2) Update Terminating procedures to capture the specific case of limiting the users from which an incoming call is allowed |
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| ***Consequences if not approved:*** | All incoming and outgoing MCVideo private calls are allowed, which contradicts stage 2 requirements |
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| ***Clauses affected:*** | 4.4.2, 10.2.2.3.2 |
|  |  |
|  | **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:*** | The only change is a missing hard space and fixing table alignment |

### 4.4.2 Warning texts

The text string included in a Warning header field consists of an explanatory text preceded by a 3-digit text code, according to the following format in Table 4.4.2-1.

Table 4.4.2-1 ABNF for the Warning text

warn-text =/ DQUOTE mcvideo-warn-code SP mcvideo-warn-text DQUOTE

mcvideo-warn-code = DIGIT DIGIT DIGIT

mcvideo-warn-text = \*( qdtext | quoted-pair )

Table 4.4.2-2 defines the warning texts that are defined for the Warning header field when a Warning header field is included in a response to a SIP INVITE request as specified in subclause 4.4.1.

Table 4.4.2-2: Warning texts defined for the Warning header field

|  |  |  |
| --- | --- | --- |
| Code | Explanatory text | Description |
| 100 | function not allowed due to <detailed reason> | The function is not allowed to this user.The <detailed reason> will be either "group definition", "access policy", "local policy", or "user authorisation", or can be a free text string. |
| 101 | service authorisation failed | The service authorisation of the MCVideo ID against the IMPU failed at the MCVideo server. |
| 102 | too many simultaneous affiliations | The MCVideo user already has N2 maximum number of simultaneous affiliations. |
| 103 | maximum simultaneous MCVideo group calls reached | The number of maximum simultaneous MCVideo group calls supported for the MCVideo user has been exceeded. |
| 104 | isfocus not assigned | A controlling MCVideo function has not been assigned to the MCVideo session. |
| 105 | subscription not allowed in a broadcast group call | Subscription to the conference event package rejected during a group call initiated as a broadcast group call. |
| 106 | user not authorised to join chat group | The MCVideo user is not authorised to join this chat group. |
| 107 | user not authorised to make private calls | The MCVideo user is not authorised to make private calls. |
| 108 | user not authorised to make chat group calls | The MCVideo user is not authorised to make chat group calls. |
| 109 | user not authorised to make prearranged group calls | The MCVideo user is not authorised to make group calls to a prearranged group. |
| 110 | user declined the call invitation | The MCVideo user declined to accept the call. |
| 111 | group call proceeded without all required group members | The required members of the group did not respond within the acknowledged call time, but the call still went ahead. |
| 112 | group call abandoned due to required group members not part of the group session | The group call was abandoned, as the required members of the group did not respond within the acknowledged call time. |
| 113 | group document does not exist | The group document requested from the group management server does not exist. |
| 114 | unable to retrieve group document | The group document exists on the group management server but the MCVideo server was unable to retrieve it. |
| 115 | group is disabled | The group has the <disabled> element set to "true" in the group management server. |
| 116 | user is not part of the MCVideo group | The group exists on the group management server but the requesting user is not part of this group. |
| 117 | the group identity indicated in the request is a prearranged group | The group id that is indicated in the request is for a prearranged group, but did not match the request from the MCVideo user. |
| 118 | the group identity indicated in the request is a chat group | The group id that is indicated in the request is for a chat group, but did not match the request from the MCVideo user, |
| 119 | user is not authorised to initiate the group call | The MCVideo user identified by the MCVideo ID is not authorised to initiate the group call. |
| 120 | user is not affiliated to this group | The MCVideo user is not affiliated to the group. |
| 121 | user is not authorised to join the group call | The MCVideo user identified by the MCVideo ID is not authorised to join the group call. |
| 122 | too many participants | The group call has reached its maximum number of participants. |
| 123 | MCVideo session already exists | Inform the MCVideo user that the group call is currently ongoing.  |
| 124 | maximum number of private calls reached | The maximum number of private calls allowed at the MCVideo server for the MCVideo user has been reached. |
| 125 | user not authorised to make private call with automatic commencement | The MCVideo user is not authorised to make a private call with automatic commencement. |
| 126 | user not authorised to make private call with manual commencement | The MCVideo user is not authorised to make a private call with manual commencement. |
| 127 | user not authorised to be called in private call | The called MCVideo user is not allowed to be part of a private call. |
| 128 | isfocus already assigned | The MCVideo server owning an MCVideo group received a SIP INVITE request destined to the MCVideo group from another MCVideo server already assigned as the controlling MCVideo function and the MCVideo server owning the MCVideo group does not support mutual aid or supports trusted mutual aid but does not authorise trusted mutual aid. |
| 137 | the indicated group call does not exist | The participating MCVideo function cannot find an ongoing group session associated with the received MCVideo session identity. |
| 138 | subscription of conference events not allowed | The controlling MCVideo function could not allow the MCVideo user to subscribe to the conference event package. |
| 139 | integrity protection check failed | The integrity protection of an XML MIME body failed. |
| 140 | unable to decrypt XML content | The XML content cannot be decrypted. |
| 141 | user unknown to the participating function | The participating function is unable to associate the public user identity with an MCVideo ID. |
| 142 | unable to determine the controlling function | The participating function is unable to determine the controlling function for the group call or private call. |
| 143 | not authorised to force auto answer | The calling user is not authorised to force auto answer on the called user. |
| 144 | user not authorised to call this particular user | The calling user is not authorised to call this particular called user. |
| 145 | unable to determine called party | The participating function was unable to determine the called party from the information received in the SIP request. |
| 146 | T-PF unable to determine the service settings for the called user | The service settings have not been uploaded by the terminating client to the terminating participating server. |
| 147 | user is authorized to initiate a temporary group call | The non-controlling MCVideo function has authorized a request from the controlling MCVideo function to authorize a user to initiate an temporary group session. |
| 148 | group is regrouped | The MCVideo group hosted by a non-controlling MCVideo function is part of a temporary group session as the result of the group regroup function. |
| 149 | SIP-INFO request pending | The MCVideo client needs to wait for a SIP-INFO request with specific content, before taking further action. |
| 150 | invalid combinations of data received in MIME body | The MCVideo client included invalid combinations of data in the SIP request. |
| 154 | user not authorised to make ambient viewing call | The MCVideo user is not authorised to make an ambient viewing call. |
| 159 | user not authorised to be called by this originating user | The called user is not authorised to receive a call by this originating user. |
| 160 | user not authorised to request creation of a regroup | The user is not authorised to request creation of a regroup. |
| 161 | user not authorised to request removal of a regroup | The user is not authorised to request removal of a regroup. |
| 162 | group call abandoned due to required group members not affiliated | The group call was abandoned as the required number of affiliated group members is not met or some required members are not affiliated. |
| 163 | the group identity indicated in the request does not exist | The server determines that the group identity indicates a user or group regroup based on a preconfigured group that does not exist. |
| 165 | group ID for regroup already in use | The group ID proposed by the client for the user/group regroup based on a preconfigured group is already in use. |
| 166 | maximum number of service authorizations reached | The number of maximum simultaneous service authorizations for the MCVideo user has been reached. |

\*\*\*\*\* Next change \*\*\*\*\*

##### 10.2.2.3.2 Terminating procedures

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

Upon receipt of a "SIP INVITE request for terminating participating MCVideo function", the participating MCVideo function:

1) if unable to process the request due to a lack of resources or a risk of congestion exists, may reject the "SIP INVITE request for terminating participating MCVideo function" with a SIP 500 (Server Internal Error) response. The participating MCVideo function may include a Retry-After header field to the SIP 500 (Server Internal Error) response as specified in IETF RFC 3261 [15], and shall not continue with the rest of the steps;

2) shall check the presence of the isfocus media feature tag in the URI of the Contact header field and if it is not present then the participating MCVideo function shall reject the request with a SIP 403 (Forbidden) response with the warning text set to "104 isfocus not assigned" in a Warning header field as specified in subclause 4.4, and shall not continue with the rest of the steps;

3) if the <session-type> element of the application/vnd.3gpp.mcvideo-info+xml MIME body is set to "private" and the Answer-Mode Indication in the application/poc-settings+xml MIME body has not yet been received from the invited MCVideo client as defined in subclause 7.3.3 or subclause 7.3.4, shall reject the request with a SIP 480 (Temporarily Unavailable) response with the warning text set to "146 T-PF unable to determine the service settings for the called user" in a Warning header field as specified in subclause 4.4 and shall not continue with the rest of the steps;

4) shall use the MCVideo ID present in the <mcvideo-request-uri> element of the application/vnd.3gpp.mcvideo-info+xml MIME body of the incoming SIP INVITE request to retrieve the binding between the MCVideo ID and public user identity;

5) if the binding between the MCVideo ID and public user identity does not exist, then the participating MCVideo function shall reject the SIP INVITE request with a SIP 404 (Not Found) response. Otherwise, continue with the rest of the steps;

6) when the called user identified by the MCVideo ID is unable to participate in private calls as identified in the called user's MCVideo user profile document (see the MCVideo user profile document in 3GPP TS 24.484 [25]) on the terminating participating MCVideo function, shall reject the "SIP INVITE request for terminating participating MCVideo function" with a SIP 403 (Forbidden) response including warning text set to "127 user not authorised to be called in private call" in a Warning header field as specified in subclause 4.4;

6a) if the <session-type> element of the application/vnd.3gpp.mcvideo-info+xml MIME body is set to "private" and if the <IncomingPrivateCallList> element exists in the MCVideo user profile document with one or more <entry> elements (see the MCVideo user profile document in 3GPP TS 24.484 [25]) and:

i) if the <mcvideo-calling-user-id> element of the application/vnd.3gpp.mcvideo-info+xml MIME body of the incoming SIP INVITE request does not match with one of the <entry> elements of the <IncomingPrivateCallList> element of the MCVideo user profile document; and

ii) if configuration is not set in the MCVideo user profile document that allows the MCVideo user to receive a private call by users not contained within the <entry> elements of the <IncomingPrivateCallList> element (see <allow-to-receive-private-call-from-any-user> element in MCVideo user profile document in 3GPP TS 24.484 [25]);

 then:

i) shall reject the "SIP INVITE request for terminating participating MCVideo function" with a SIP 403 (Forbidden) response including warning text set to "159 user not authorised to be called by this originating user" in a Warning header field as specified in subclause 4.4 and shall not continue with the rest of the steps;

7) shall perform the automatic commencement procedures specified in subclause 6.3.2.2.5.1 and according to IETF RFC 5373 [27] if one of the following conditions are met:

a) "SIP INVITE request for terminating participating MCVideo function" contains an Answer-Mode header field with the value "Auto";

b) "SIP INVITE request for terminating participating MCVideo function" does not contain an Answer-Mode header field and the Answer-Mode Indication received in the application/poc-settings+xml MIME body received from the invited MCVideo client as per subclause 7.3.3 or subclause 7.3.4 is set to "auto-answer"; or

c) "SIP INVITE request for terminating participating MCVideo function" contains a Priv-Answer-Mode header field with the value "Auto"; and

8) shall perform the manual commencement procedures specified in subclause 6.3.2.2.6.1 and according to IETF RFC 5373 [27] if either of the following conditions are met:

a) "SIP INVITE request for terminating participating MCVideo function" contains an Answer-Mode header field with the value "Manual";

b) "SIP INVITE request for terminating participating MCVideo function" does not contain an Answer-Mode header field and Answer-Mode Indication received in the application/poc-settings+xml MIME body received from the invited MCVideo client as per subclause 7.3.3 or subclause 7.3.4 is set to "manual-answer"; or

c) "SIP INVITE request for terminating participating MCVideo function" contains a Priv-Answer-Mode header field with the value "Manual".