**3GPP TSG- Meeting # *S6-243373***

**, , -**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** | 1 | **Current version:** |  |  |
|  |
| *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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **x** |

|  |
| --- |
|  |
| ***Title:***  |  |
|  |  |
| ***Source to WG:*** |  |
| ***Source to TSG:*** | SA6 |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | 23.379 clause 10.14. ‘Ambient listening call procedures’ specifies ambient listening procedures and flows for set up and release. It does not quite state whether the call can be initiated when ambient target user is already on an MCPTT call. Clause only merely states what happens when user joins or initiates a MCPTT call. As per stage 1, during MCPTT call ambient listening session should be terminated. |
|  |  |
| ***Summary of change:*** | Adds clarification to ambient listening call during an MCPTT call.  |
|  |  |
| ***Consequences if not approved:*** | TS 23.379 would not completely cover the following stage 1 requirement in TS 22.179.[R-6.16.2.2.1-004] The MCPTT Service shall terminate Ambient Listening if the MCPTT User being listened to starts to transmit in an MCPTT Private Call or an MCPTT Group Call |
|  |  |
| ***Clauses affected:*** | 10.14.3.1, 10.14.3.2 |
|  |  |
|  | **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:*** |  |

### 10.14.3 Ambient listening call procedures

#### 10.14.3.1 Remotely initiated ambient listening call setup

The MCPTT service provides the capability for an authorised user to initiate a remotely initiated ambient listening call at an MCPTT client.

Figure 10.14.3.1-1 illustrates the information flow for remotely initiated ambient listening call setup.

Pre-conditions:

- MCPTT client 1 is the client of the authorized user who is authorized to invoke a remotely initiated ambient listening call to be set up at the requested MCPTT client 2.

- MCPTT user 1 is the "listening" user at MCPTT client 1, and MCPTT user 2 is the "listened to" user at MCPTT client 2.



Figure 10.14.3.1-1: Remotely initiated ambient listening call

1. MCPTT client 1 initiates a remotely initiated ambient listening call by sending the ambient listening call request to the MCPTT server. The remotely initiated ambient listening call type is included.

2. The MCPTT server performs an authorization check for the authorized user 1 for the remotely initiated ambient listening call. If authorization fails, the MCPTT server provides a failure response to MCPTT client 1, as per step 5. The MCPTT server also performs check if MCPTT client 2 is engaged in an MCPTT Private Call or an MCPTT Group Call, provides a response to MCPTT client 1, indicating whether the call is set up successfully or not as per step 5.

3. The MCPTT server sends the ambient listening call request to MCPTT client 2.

NOTE: MCPTT client 2 does not provide any indication of the ambient listening call request to its user.

4. MCPTT client 2 returns the ambient listening call response to the MCPTT server.

5. MCPTT server provides an ambient listening call response to MCPTT client 1, indicating whether the call is set up successfully or not.

6. The floor control server of the MCPTT server then sends a floor granted to MCPTT client 2 according to the ambient listening type received in step 1.

7. Accordingly, the floor control server of the MCPTT server sends a floor taken to MCPTT client 1.

8. After receiving the floor granted message at the MCPTT client 2, the media is transmitted from MCPTT client 2 to MCPTT client 1.

#### 10.14.3.2 Locally initiated ambient listening call setup

The MCPTT service provides the capability for an authorised user to initiate a locally initiated ambient listening call at an MCPTT client.

Figure 10.14.3.2-1 illustrates the information flow for locally initiated ambient listening call setup.

Pre-conditions:

- MCPTT client 2 is the client of the authorized user who is authorized to invoke a locally initiated ambient listening call to be set up at the requested MCPTT client 1.

- MCPTT user 1 is the "listening" user at MCPTT client 1, and MCPTT user 2 is the "listened to" user at MCPTT client 2.

- MCPTT client 2 is not already engaged in an MCPTT Private Call or an MCPTT Group Call.



Figure 10.14.3.2-1: Locally initiated ambient listening call

1. MCPTT client 2 initiates a locally initiated ambient listening call by sending the ambient listening call request to the MCPTT server. The locally initiated ambient listening call type is included.

2. The MCPTT server performs an authorization check for the authorized user 2 for the locally initiated ambient listening call. If authorization fails, the MCPTT server provides a failure response to MCPTT client 2.

3. The MCPTT server sends the ambient listening call request to MCPTT client 1.

4. MCPTT client 1 returns the ambient listening call response to the MCPTT server.

5. MCPTT server provides an ambient listening call response to MCPTT client 2, indicating whether the call is set up successfully or not.

6. The floor control server of the MCPTT server then sends a floor granted to MCPTT client 2 according to the ambient listening type received in step 1.

7. Accordingly, the floor control server of the MCPTT server sends a floor taken to MCPTT client 1.

8. After receiving the floor granted message at the MCPTT client 2, the media is transmitted from MCPTT client 2 to MCPTT client 1.

NOTE: MCPTT client 2 does not provide any indication of the ambient listening call request to its user.

#### 10.14.3.3 Ambient listening call release – server initiated

Figure 10.14.3.3-1 illustrates the information flow for ambient listening call release – server initiated when trigger by the MCPTT administrator. This procedure is applied for both remotely initiated ambient listening call and the locally initiated ambient listening call.

Pre-conditions:

- MCPTT client 1 is the MCPTT client of the authorized user, who initiated the ambient listening call at MCPTT client 2.

- There is an ongoing ambient listening call between MCPTT client 2 and MCPTT client 1.

- MCPTT user 1 is the current user at MCPTT client 1 who is listening, and MCPTT user 2 is the current user at MCPTT client 2 who is being listened to.



Figure 10.14.3.3-1: Ambient listening call release – server initiated

1. The ambient listening call release is triggered by the MCPTT administrator or by one of the following events:

- the MCPTT server receives MCPTT call requests towards MCPTT client 2; or

- the MCPTT client 2 initiates MCPTT call requests;

2. The MCPTT server sends an ambient listening call release request to MCPTT client 2.

3. MCPTT client 2 stops transmitting media to MCPTT client 1.

NOTE: MCPTT client 2 does not provide any indication of the ambient listening call release to its user.

4. MCPTT client 2 provides an ambient listening call release response to the MCPTT server.

5. The MCPTT server sends an ambient listening call release notification to MCPTT client 1 together with a reason code identifying that the call was released.

6. MCPTT client 1 notifies the authorized user 1.

#### 10.14.3.4 Remotely initiated ambient listening call release – "listening" user initiated

Figure 10.14.3.4-1 illustrates the information flow for ambient listening call release – "listening" user initiated. This procedure is applied for both remotely initiated ambient listening call and the locally initiated ambient listening call.

Pre-conditions:

- MCPTT client 1 is the MCPTT client of the authorized user, who is authorized to release the ambient listening call at MCPTT client 2.

- There is an ongoing ambient listening call between MCPTT client 2 and MCPTT client 1.

- MCPTT user 1 is the "listening" user at MCPTT client 1, and MCPTT user 2 is the "listened to"user at MCPTT client 2.



Figure 10.14.3.4-1: Ambient listening call release – "listening" user initiated

1. The authorized user 1 at MCPTT client 1 initiates the ambient listening call release by sending an ambient listening call release request to the MCPTT server.

2. The MCPTT server provides an ambient listening call release request to MCPTT client 2.

3. MCPTT client 2 stops transmitting media to MCPTT client 1.

NOTE: MCPTT client 2 does not provide any indication of the ambient listening call release to its user.

4. MCPTT client 2 provides an ambient listening call release response to the MCPTT server.

5. The MCPTT server provides the ambient listening call release response to MCPTT client 1.

#### 10.14.3.5 Ambient listening call release – "listened to" user initiated

Figure 10.14.3.5-1 illustrates the information flow for ambient listening call release – "listened to" user initiated. This procedure is only applied for the locally initiated ambient listening call.

Pre-conditions:

- There is an ongoing ambient listening call between MCPTT client 1 and MCPTT client 2.

- MCPTT user 1 is the "listening" user at MCPTT client 1, and MCPTT user 2 is the "listened to" user at MCPTT client 2.

- MCPTT client 2 is the MCPTT client of the authorized user, who is authorized to release the locally initiated ambient listening call at MCPTT client 2.



Figure 10.14.3.5-1: Ambient listening call release – "listened to" user initiated

1. The authorized user 2 at MCPTT client 2 initiates the ambient listening call release by sending an ambient listening call release request to the MCPTT server.

2. The MCPTT server provides an ambient listening call release request to MCPTT client 1.

3. The user 1 at MCPTT client 1 is notified about the ambient listening call release.

4. MCPTT client 1 provides an ambient listening call release response to the MCPTT server.

5. The MCPTT server provides the ambient listening call release response to MCPTT client 2.

6. MCPTT client 2 stops transmitting media to MCPTT client 1.

NOTE: MCPTT client 2 does not provide any indication of the ambient listening call release to its user.