**3GPP TSG-CT WG1 Meeting #123-eC1-202xxx**

**Electronic meeting, 16-24 April 2020 was C1-202560**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.380** | **CR** | **0231** | **rev** | **1** | **Current version:** | **16.4.0** |  |
|  | | | | | | | | |
| *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 | **X** |

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| ***Title:*** | Talker location sharing in remote ambient call | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MCProtoc16 | | | | |  | ***Date:*** | | | 2020-04-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In case of ambient call of subclause 11.1.6, the existing procedure covers the location sharing of the originator of the call based on the requirement of current talker location sharing. The procedure will help in case of a locally-initiated ambient call, but in case of remotely-initiated ambient call the procedure has a flaw. This flaw exists in a remote ambient call based on on-demand or pre-established session both. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Corrected the procedure of ambient call to handle the location sharing in case of remote ambient call. The server will request the acknowledgment for the floor grant message and the client will share the location in the grant acknowledgement message. The received location shall be shared with the listener using the existing location sharing procedure within the floor taken message. | | | | | | | | |
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| ***Consequences if not approved:*** | | No procedure to share the current talker location information for remote ambient calls. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2.4.4.2, 6.3.4.4.2, and 8.2.13 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \* \* \* \*

##### 6.2.4.4.2 Receive Floor Granted message (R: Floor Granted)

Upon receiving a Floor Granted message from the floor control server or a floor granted indication in a SIP 200 (OK) response in the application and signalling layer, the floor participant:

1. if the first bit in the subtype of the Floor Granted message is set to '1' (Acknowledgment is required) as described in subclause 8.2.2, shall send a Floor Ack message. The Floor Ack message:

a. shall include the Message Type field set to '1' (Floor Granted);

b. shall include the Source field set to '0' (the floor participant is the source); and

c. if the call is a remotely-initiated ambient listening call and if the user's MCPTT profile allow sending the user's location, shall include the location field. If sending the user's location is not allowed, the location field may be included with the location type field set to '0' (Not provided);

2. shall provide floor granted notification to the user, if not already done;

NOTE: Providing the floor granted notification to the user prior to receiving the Floor Granted message is an implementation option.

3. if the Floor Indicator field is included and the B-bit is set to '1' (Broadcast group call), shall provide a notification to the user indicating the type of call;

4. if the G-bit in the Floor Indicator is set to '1' (Dual floor) shall store an indication that the participant is overriding without revoke;

5. shall stop the optional timer T103 (End of RTP media), if running;

6. shall stop timer T101 (Floor Request); and

7. shall enter the 'U: has permission' state.

\* \* \* \* \* \* \* SECOND CHANGE \* \* \* \* \* \* \*

##### 6.3.4.4.2 Enter the 'G: Floor Taken' state

When entering this state the floor control arbitration logic in the floor control server:

1. shall send a Floor Granted message to the floor participant to which the floor is granted. The Floor Granted message:

a. shall include the value of timer T2 (Stop talking)in the Duration field;

b. shall include the granted priority in the Floor priority field;

c. if a Track Info field associated with the floor control server state transition diagram for 'general floor control operation' is stored, shall include the stored Track Info field;

d. if a group call is a broadcast group call, system call, emergency call, an imminent peril call or a temporary group session, shall include the Floor Indicator field with appropriate indications; and

e. if the call is a remotely-initiated ambient listening call, shall set the first bit in the subtype of the Floor Granted message to '1' (Acknowledgment is required) as described in subclause 8.2.2;

NOTE: If the call is an ambient listening call and the ambient listening call type is remote-initiated, then the floor participant to which the floor is granted is the terminating floor participant of the call. Otherwise the floor is granted to the participant which requested the floor.

2. shall start timer T20 (Floor Granted) if the floor request was queued for the participant to which the floor is granted and initialise the counter C20 (Floor Granted) to 1;

3. shall send Floor Taken message to all other floor participants. The Floor Taken message:

a. if the floor is currently granted only to one particpant:

i shall include the granted MCPTT user's MCPTT ID in the Granted Party's Identity field, if privacy is not requested; and

ii. may include the functional alias of the granted MCPTT user in the Functional Alias field, if privacy is not requested;

b. if multi-talker is supported and the floor is currently granted to multiple participants:

i. shall include the Floor Indicator field with the I-bit set to '1' (Multi-talker);

ii. shall include the list of granted users in the multi-talker group in List of Granted Users field, including a new granted talker;

iii. shall include the list of SSRCs of granted floor participants; and

iv) may include the list of functional aliases of the granted floor participants in the List of Functional Aliases field;

c. shall include a Message Sequence Number field with a Message Sequence Number value increased with 1;

d. if the session is a broadcast group call or an ambient listening call, shall include the Permission to Request the Floor field set to '0';

e. if the session is not a broadcast group call, may include the Permission to Request the Floor field set to '1'; and

f. if a group call is a broadcast group call, a system call, an emergency call, an imminent peril call, or a temporary group session, shall include the Floor Indicator field with appropriate indications;

4. shall start timer T1 (End of RTP media) for the participant to which the floor is granted;

5. shall set the general state to 'G: Floor Taken' state; and

6. if configured to support multi-talker floor control the group is configured to shall add the MCPTT identity of the participant to which the floor is granted to the list of currently granted talkers.

\* \* \* \* \* \* \* THIRD CHANGES \* \* \* \* \* \* \*

### 8.2.13 Floor Ack message

The Floor Ack message is used to acknowledge any floor control message that included the first bit (marked as x in the subtype) set to 1 (see subclause 8.2.2).

The Floor Ack message is only used in the on-network mode. The Floor Ack message is only used over the unicast bearer.

Table 8.2.13-1 shows the content of the Floor Ack message.

Table 8.2.13-1: Floor Ack message

0 1 2 3

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1

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|V=2|P| Subtype | PT=APP=204 | length |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| SSRC of the sender |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| name=MCPT |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Source field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Message Type field |

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| Track Info field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Location field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

**Subtype:**

The subtype is coded according to table 8.2.2-1.

**Length:**

The length is coded as specified in subclause 8.1.2.

**SSRC:**

The SSRC field carries the SSRC of the source identified by the Source field.

The SSRC field is coded as specified in IETF RFC 3550 [3].

**Source:**

The Source field is coded as specified in subclause 8.2.3.12.

**Message Type:**

The Message Type field contains the floor control message that is acknowledged by the Floor Ack message. The Message Type field is coded as specified in subclause 8.2.3.14.

**Track Info:**

The Track Info field is included when an MCPTT call involves a non-controlling MCPTT function. The coding of the Track Info field is described in subclause 8.2.3.13.

**Location:**

The Location field is coded as described in subclause 8.2.3.21 and contains the location information of the granted floor user. This field shall be omitted when location information of the granted floor user is not allowed by the granted floor user’s MCPTT profile, or alternatively may be included with the location type field set to 0 (Not provided).

\* \* \* \* \* \* \* END CHANGES \* \* \* \* \* \* \*