**3GPP TSG-SA WG6 Meeting #62 S6-****243378**

**Maastricht, Netherlands, 19th – 23rd August 2024 (revision of S6-242096, 243291)**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** | **2** | **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)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **x**  |

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|  |
| ***Title:***  | Interworking ad hoc group call  |
|  |  |
| ***Source to WG:*** | Huawei, Hisilicon, Nokia, Kontron |
| ***Source to TSG:*** | SA6 |
|  |  |
| ***Work item code:*** | FRMCS\_Ph5 |  | ***Date:*** | 2024-08-06 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | The ad hoc group call interworking, e.g., with GSM-R is missing.  |
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| ***Summary of change:*** | Add the ad hoc group call interworking procedures and information flows. |
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| ***Consequences if not approved:*** | ad hoc group call LMR interworking is not supported. |
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| ***Clauses affected:*** | New {10.x, 10.x.1, 10.x.2, 10.x.2.1, 10.x.2.2, 10.x.2.3, 10.x.2.4, 11.x.2.5, 10.x.3, 10.x.3.1, 10.x.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:*** |  |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1st changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#### 10.17.3.x IWF ad hoc group call initiated by an MCPTT user using a participants list

In this procedure, an MCPTT user is initiating an ad hoc group call with both MCPTT users and LMR users.

Pre-conditions:

1. The MCPTT client 1 knows the MCPTT IDs of the participants, including both MCPTT users and LMR users, to be involved in this call.

2. MCPTT client 1 and MCPTT client 2 are registered, and their respective users are authenticated and authorized to use the MCPTT service.

NOTE 1: For all the signalling messages passing through the IWF between the MCPTT system and the LMR system, the IWF performs the identity conversion and protocol translation.



Figure 10.x.3.1-1: Ad hoc group call setup initiated by an MCPTT user in the MCPTT system

The procedure and information flows as defined in 3GPP TS 23.379 [7] clause 10.19.3.1.1 is applied with the following differences:

1-3. Same as clause 10.19.3.1.1 in 3GPP TS 23.379 [7].

4a-4b. For each of the LMR users, the MCPTT server sends the IWF ad hoc group call request to the IWF. The IWF returns the IWF ad hoc group call response to the MCPTT server.

NOTE 2: IWF can handle the IWF ad hoc group call as a normal group call towards the LMR user in LMR system.

5. Same as clause 10.19.3.1.1 in 3GPP TS 23.379 [7].

6. If the initiating MCPTT user requires the acknowledgement from the invited MCPTT users, and the required MCPTT users do not acknowledge the call setup within a configured time (the "acknowledged call setup timeout"), then the MCPTT server may proceed with or abandon the call and then notify the initiating MCPTT user that the acknowledgements did not include all required members according to ad hoc group call policy from the user profile configuration. The MCPTT server may notify the initiating MCPTT user of all MCPTT users who did not acknowledge the ad hoc group call request within the configured time. This notification may be sent to the initiating MCPTT user by the MCPTT server more than once during the call when MCPTT users join or leave the MCPTT ad hoc group call.

NOTE 3: For LMR users notification of not acknowledging the ad hoc group call is not possible.

7. MCPTT client 1, MCPTT client 2, and the LMR users establish media plane and floor control resources.