**3GPPSA4 #121 S4-221292**

**Toulouse, France, 14-18 Nov 2022**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **26**.**501** | **CR** | **0043** | **rev** | **-** | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *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:*** | **[5GMSA\_PH2] Uplink streaming: Updating remote control process** | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Tencent | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GMSA\_PH2 | | | | |  | ***Date:*** | | | 11/08/2022 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | 19 |
|  | *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)* | |
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| ***Reason for change:*** | | It is not clear how the remote control for uplink streaming is provisioned and how it is being used. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update 6.6 by showing:   * Provisioning of the remote control option * The use of the remote control option by the remote controller entity | | | | | | | | |
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| ***Consequences if not approved:*** | | The remote control is unusable. | | | | | | | | |
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| ***Clauses affected:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

CHANGE

## 6.6 Providing Remote Control

The procedure which is shown in Figure 6.6-1 defines the remote control of a 5GMSu Client by a Remote controller application via a 5GMSu AF. The Remote controller application may be running on the UE or in the trusted or external network.



Figure 6.6-1: High-Level Procedure for remote control of a 5GMS uplink streaming session

Steps:

1. The 5GMSu Application Provider creates a Provisioning Session, providing its 5GMSu Application Provider identifier as input. 5GMSu Application Provider queries the capabilities and authorized features.

2. As part of Content Publishing Configuration provisioning, the 5GMSu Application Provider specifies that a remote-controlled option is desired. The protocol and characteristics of the remote control option may be also included in this provisioning request.

3. When content publication is needed, the 5GMSu AF interacts with the 5GMSu AS to allocate resources for the provisioned M2u egest protocol and format. Then the 5GMSu AS responds with the M2u content egest endpoint address.

4. The 5GMSu AF compiles the Service Access Information. The Service Access Information contains access details and options such as the Provisioning Session identifier, and M5u (Media Session Handling) address for an uplink entry point, including the remote control option and its protocol.

5. The 5GMSu AF provides the results to the 5GMSu Application Provider.

a. When the 5GMSu Application Provider has selected full Service Access Information (to be forwarded to the 5GMS-Aware Application at reference point M8u), the results are provided in the form of addresses and configurations for M2u (content egest), M5u (Media Session Handling), M4u (Media Uplink Streaming), and the remote control parameters, if any.

b. When the 5GMSu Application Provider has delegated Service Access Information handling to the 5GMS System, a reference to the Service Access Information (e.g. an URL) is provided. The Media Session Handler fetches the full Service Access Information later from the 5GMSu AF.

6. The 5GMSu Application Provider executes Service Announcement and updates the UE (during the lifetime of the Provisioning Session) including the remote control parameters.

7. The 5GMSu Application Provider sends the remote control information to the Remote controller application.

8. The Remote controller application sends a remote control command to the 5GMSu AF using the defined protocol.

9. The 5GMSu AF forwards the remote control command to the 5GMSu Client at reference point M5u.

10. The 5GMSu Client takes the required action based on the received remote control command.

11. The 5GMSu Client acknowledges the command results to the invoking 5GMSu AF.

12. The 5GMSu AF acknowledges the command results to the Remote controller application.

END OF CHANGES