**3GPP TSG-SA4 Meeting #121 *S4-221385rev1***

**Toulouse, France, 14th - 18th November 2022**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **TS 26.501** | **CR** |  | **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)*.* |
|  |

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

|  |
| --- |
|  |
| ***Title:***  | Collaboration scenario for media production |
|  |  |
| ***Source to WG:*** | Sony Europe B.V. |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** | 5GMSA\_Ph2 |  | ***Date:*** | 2022-11-14 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** |  Rel-18 |
|  | *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)* |
|  |  |
| ***Reason for change:*** | Add a relevant real-world collaboration scenario for 5GMS |
|  |  |
| ***Summary of change:*** | Add a straightforward collaboration scenario for professional media production, i.e. the “breaking news” event coverage scenario with a single camera source in a public network |
|  |  |
| ***Consequences if not approved:*** | A relevant area for collaboration use cases is disregarded |
|  |  |
| ***Clauses affected:*** | Annex A |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  |  |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  |  |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  |  |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

CHANGE

# A.16 Uplink media streaming with AF and AS in the external domain

This collaboration scenario reflects the professional media production scenario whereby a single camera provides a live feed to a media production centre via a public 5G network. This production scenario is often referred to as the “breaking news” scenario, since the live stream is provided ad hoc without any dedicated media production network resources being in place prior to the production event.

In this scenario both the 5GMSu AS and 5GMSu AF reside in the external DN/domain. Hence the overall 5GMS network architecture is the same as for the collaboration scenario described in clause A.14.

Figure A.16-1 provides a high-level call flow for this collaboration scenario.



Figure A.16-1: Call flow for uplink media streaming with AF and AS in the external domain

Steps:

1. The 5GMSu Application Provider creates a Provisioning Session for uplink streaming with the 5GMSu AF (M1u′).

2. The 5GMSu Application Provider creates a Content Publishing Configuration as part of the Provisioning Session that defines the instructions for content egest (M1u′).

3. The 5GMSu AF, based on the received publishing configuration, requests the 5GMSu AS to confirm the availability of content resources for egest (M3u).

4. The 5GMSu AF acknowledges the successful creation of the Content Publishing Configuration to the 5GMSu Application Provider (M1u′).

5. The 5GMSu Application Provider provisions the media production session with the 5GMS-Aware Application (M8u).

NOTE: Step 5 is implementation-dependent.

6. The 5GMS-Aware Application requests the 5GMSu Client to start an uplink streaming session (M6u/M7u).

7. The 5GMSu Client requests the start of media uplink streaming (M5u).

8. The 5GMSu Client requests a bit rate recommendation from the 5GMSu AF (M5u) and the 5GMSu AF provides the bit rate recommendation to the 5GMSu Client in response.

NOTE: The procedures associated with AF-based Network Assistance interactions between the 5GMSu AF and the PCF or NEF are omitted here.

9. Uplink media streaming starts from the 5GMSu Client to the 5GMSu AS (M4u).

10. Media streaming content egest starts from the 5GMSu AS to the 5GMSu Application Provider (M2u′).

When event coverage has completed:

??. The 5GMSu Application Provider (M2u′) terminates the egest from the 5GMSu AS.

??. The 5GMSu AF terminates the uplink media streaming session.

11. The 5GMSu AS releases its resources.