**3GPP TSG SA WG4 #116e *S4-211427***

**E-meeting, 10-19 November, 2021**

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| *CR-Form-v12.0* | | | | | | | | |
| **Pseudo CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.804** | **CR** | **<CR#>** | **rev** | **1** | **Current version:** | **0.5.0** |  |
|  | | | | | | | | |
| *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:*** | [FS\_5GMS-EXT] HTTP/3 collaboration for uplink media streaming | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Tencent | | | | | | | | | |
| ***Source to TSG:*** | SA4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | FS\_5GMS-EXT | | | | |  | ***Date:*** | | | 2021-11-03 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | Support uplink collaboration using HTTP/3 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 5.4.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |
| ***56*** | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**===== CHANGE =====**

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

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**===== CHANGE =====**

5.4.2.3 HTTP/3 collaboration for uplink media streaming

For this key topic, the discussion will focus on a media plane only collaboration scenario where the 5GMSu AS is deployed in the trusted domain. This collaboration scenario is described in clause 5.5.2.2 and illustrated in figure 5.5.2.2-1.

If HTTP/3 is used as an uplink application protocol for this collaboration scenario, the uplink media is streamed via reference point M4u from the Media Streamer subfunction of an HTTP/3-enabled 5GMSu Client to an HTTP/3-enabled 5GMSu AS, and then streamed from the 5GMSu AS to an HTTP/3-enabled 5GMSu Application Provider at reference point M2u.

Editor’s Note: Section 5.5.2.7, describing a "hybrid, i.e. end-to-end form of collaboration across uplink media streaming and downlink media streaming services", and Section 5.2.4.3 on "Content preparation between uplink ingest and downlink streaming", would be useful to cover in Section 5.4 as well. The following paragraph would then be moved to a new Section 5.4.2.X that is based on these collaboration scenarios.

Uplink ingest formats are also a key topic in this study, and clause 5.2.1 names several existing uplink ingest formats to be studied. Even for the formats not routinely carried over HTTP (e.g. RTP-based RIST [20], [21] and SRT [SRT]), discussions are underway in the Internet Engineering Task Force to specify direct mappings onto QUIC (for instance, [QRT] and [RTPQ] for RTP and [SRT-QUIC] for SRT).

.**===== END CHANGES =====**