**3GPP TSG SA WG4 #116e *S4-211542***

**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 Candidate Solution - 5GMS Operation | | | | | | | | | |
|  |  | | | | | | | | | |
| ***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:*** | | Describe candidate solution for HTTP/3 operation on 5GMS | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 5.4.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

…

[QLOG-schema] Robin Marx, Luca Niccolini, Marten Seemann, draft-ietf-quic-qlog-main-schema-01, “Main logging schema for qlog”, Internet-Draft, Work in Progress, 25 October 2021.

[QLOG-H3] Robin Marx, Luca Niccolini, Marten Seemann, draft-ietf-quic-qlog-h3-events-00, “HTTP/3 and QPACK event definitions for qlog”, Internet-Draft, Work in Progress, 10 June 2021.

[QLOG-QUIC] Robin Marx, Luca Niccolini, Marten Seemann, draft-ietf-quic-qlog-quic-events-00, “QUIC event definitions for qlog”, Internet-Draft, Work in Progress, 10 June 2021.

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

5.4.6 Candidate Solutions

#### 5.4.6.1 Solution overview

Editor’s Note: Provide candidate solutions (including call flows) for each of the identified issues.

#### 5.4.6.2 Metrics reporting using QLOG events

One adjustment to the 5GMS architecture to accommodate HTTP/3 could be to metrics reporting. In addition to DASH metrics, providing metrics on HTTP/3 and, perhaps, even on QUIC might be useful for 5GMS System operators.

A capability called “QLOG” is under development in the Internet Engineering Task Force, which has adopted three specifications – a main schema specification [QLOG-schema], a specification for HTTP/3-level events [QLOG-H3], and a specification for QUIC-level events [QLOG-QUIC].

QLOG defines s generic format of events and a mapping to JSON in [QLOG-schema], but these events can be stored, aggregated, and reported in a variety of ways.

Editor’s Note: Identify the impact of including QLOG events on 5GMS metrics reporting.

Until DASH metrics are updated to account for HTTP/3-based delivery, QLOG would be especially valuable, and would provide event reporting for any streaming media over HTTP/3, or even over another streaming protocol that has been encapsulated in QUIC.

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