**Source:** Tencent (Rapporteur) and Ericsson (Editor)

**Title:** FS\_5GMS\_EXT: Proposed Work Plan v(4.0)

**Version:** 4

**Document for** Agreement

**Agenda item:** 8.9

# Introduction

The Study on 5G media streaming extensions (FS\_5GMS\_EXT) was approved at SA#111. This SI investigate the potential improvement and extensions of 5GMSA in the following 10 topics:

1. Content Preparation
2. Traffic Identification
3. Additional / New transport protocols
4. Uplink media streaming
5. Background traffic
6. Content Aware Streaming
7. Network Event usage
8. Per-application-authorization
9. Support for encrypted and high-value content
10. Scalable distribution of unicast Live Services

The objectives of this SI are defined as:

1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols.
2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics.
3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models.
4. Map the key topics to basic functions and develop high-level call flows.
5. Identify the issues that need to be solved.
6. Provide candidate solutions (including call flows) for each of the identified issues.
7. Coordinate work with other 3GPP groups e.g. SA2, SA3, SA5, and others as needed.
8. Coordinate work with external organizations such as DASH-IF, CTA WAVE, ISO/IEC JTC29 WG3 (MPEG Systems), or IETF, as needed.
9. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.

The following workplan defines the timeline for completing the above tasks (1-6 and 9) for all topics. Note that all topics may not progress at the same paste.

# Proposed Time and Work Plan

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| --- | --- |
| Meeting | Study on 5G media streaming extensions |
| SA4#111 | Approval of SI |
| SA4#112 | Discuss the following objectives for each topic:  * 1. Document each topics in more detail, in particular how they relate to the 5GMS Architecture and protocols.   2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics.   3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models.  Agree on Draft TR (v0.1.0) |
| Telco#1 (Topic: : FS\_5GMS\_EXT, Date: XX XXX 2021, Time 18:00-20:00 CET, Host: Tencent) | Update on:  * 1. Document each topics in more detail, in particular how they relate to the 5GMS Architecture and protocols.   2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics.   3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models.  Agree on pCRsContribution submission deadline: 23:59 CET, the XXXday prior to the telco. |
| Telco#2 (Topic: : FS\_5GMS\_EXT, Date: XX XXX 2021, Time 18:00-20:00 CET, Host: Tencent) | Update on:  1. Document each topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models.  * Discuss the following objective for each topic which completed objectives 1-3:  1. Map the key topics to basic functions and develop high-level call flows. 2. Identify the issues that need to be solved. 3. Provide candidate solutions (including call flows) for each of the identified issues.  Update previous pCPRs and/or issue new CRs.Contribution submission deadline: 23:59 CET, the XXXday prior to the telco. |
| SA4#113 (04/06-04/14) | Update on:  1. Document each topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models.  * Discuss the following objective for each topic which completed objectives 1-6:  1. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Agree on pCR TR26.804 |
| SA4 MBS SWG Telco – Date 22nd Apr, 2021, time 14:00-17:00 CEST;Host: QualcommDocument submission deadline: 20th Apr, 2021, 23:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update previous pCPRs and/or issue new CRs. |
| SA4 MBS SWG Telco – Date 6th May, 2021, time 15:00-18:00 CEST;Host: QualcommDocument submission deadline: 4th May, 2021, 23:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update previous pCPRs and/or issue new CRs. |
| SA4#114 (05/24-05/28) | Finalize the remaing work in the objectives.Agree on pCR TR26.804 |
| SA4 MBS SWG Telco – Date 10th June, 2021, time 16:00-18:00 CEST;Host: QualcommDocument submission deadline: 8th June, 2021, 23:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update previous pCPRs and/or issue new CRs. |
| SA4 MBS SWG Telco – Date 24th June, 2021, time 16:00-18:00 CEST;Host: QualcommDocument submission deadline: 22nd June, 2021, 23:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update previous pCPRs and/or issue new CRs. |
| SA4 MBS SWG Telco – Date 8th July, 2021, time 16:00-18:00 CEST;Host: QualcommDocument submission deadline: 6th July, 2021, 23:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update previous pCPRs and/or issue new CRs. |
| SA4 MBS SWG Telco – Date 22nd July, 2021, time 16:00-18:00 CEST;Host: QualcommDocument submission deadline: 20th July, 2021, 23:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update previous pCPRs and/or issue new CRs. |
| SA4 MBS SWG Telco – Date 5th August, 2021, time 16:00-18:00 CEST;Host: QualcommDocument submission deadline: 3rd August, 2021, 23:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update previous pCPRs and/or issue new CRs. |
| SA4#115 (08/18-08/27) | Continue the remaining work in the objectives.Agree on updated pCR TR26.804 |
| 3GPP SA4 MBS SWG AH post 115-eDate: Oct 7, 2021, -15:30 – 18:00 CESTDocument Submission deadline: Oct 6, 2021, 11:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update the previous pCPRs and/or issue new CRs. |
| 3GPP SA4 MBS SWG AH post 115-eDate: Oct 21, 2021, 15:30 – 18:30 CESTDocument Submission deadline: Oct 20, 2021, 11:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update the previous pCPRs and/or issue new CRs. |
| 3GPP SA4 MBS SWG AH post 115-eDate: Oct 28, 2021, 15:30 – 18:30 CESTDocument Submission deadline: Oct 27, 2021, 11:59 CEST | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.  Update the previous pCPRs and/or issue new CRs. |
| SA4#116 (11/10-11/19) | Work on the remaining open items in the objectives.Agree on draft CR TR26.804 |
| Post SA4#116e Conf Calls,Host: Qualcomm | Update on:  1. Document the above key topics in more detail, in particular how they relate to the 5GMS Architecture and protocols. 2. Study collaboration scenarios between the 5G System and Application Provider for each of the key topics. 3. Based on the 5GMS Architecture, develop one or more deployment architectures that address the key topics and the collaboration models. 4. Map the key topics to basic functions and develop high-level call flows.  * Discuss the following objective for each topic which completed objectives 1-4:  1. Identify the issues that need to be solved. 2. Provide candidate solutions (including call flows) for each of the identified issues. 3. Identify gaps and recommend potential normative work for stage-2 call flows and possibly stage-3.   Update the previous pCRs and/or issue new pCRs.   |  |  | | --- | --- | | Conf Calls | Submission Deadline | | Dec 2, 2021, 15:00 – 17:00 CET | Dec 1, 2021, 12:00pm CET | | Dec 9, 2021, 15:00 – 18:00 CET(Note: EVEX joint call) | Dec 8, 2021, 12:00pm CET | | Dec 16, 2021, 22:00 – 00:00 CET | Dec 15, 2021, 12:00pm CET | | Jan 13, 2022, 15:00 – 17:00 CET | Jan 12, 2022, 12:00pm CET | | Feb 3, 2022, 15:00 – 17:00 CET | Feb 2, 2022, 12:00pm CET | |
| SA#94-e (Dec 2021) | Present draft TR26.804 for information |
| SA4#117 (02/14-02/18) | Finalize the remaining work in the objectives.Agree on CR TR26.804 |
| SA#95-e (16-18 Mar 2022) | Present TR26.804 for approval |