**3GPP TSG-SA WG4 Meeting #131-bis-e S4-250460r01**

**Online, 11 – 17 April 2025**

**Agenda item:** 8.5

**Source:** Qualcomm Germany

**Title:** [AMD\_PRO-MED] Detailed Work Plan for DRM

**Document for** Agreement

# Introduction

During SA4#131 Work Item on “Stage 3 for Advanced Media Delivery” was agreed in [S4-250411](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_131_Geneva/Docs/S4-250411.zip) and afterwards approved in by SA plenary #107 in [SP-250265](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_107_Incheon_2025-03/Docs/SP-250265.zip).

The objective of this work item is to address the recommendations for stage-3 extensions of the studies FS\_AMD and FS\_MS\_NS\_Ph2 in the relevant specifications, primarily TS 26.510, TS 26.512 and TS 26.517, and based on the stage-2 extensions in TS 26.501 and TS 26.502.

For DRM, the following aspects are identified.

Stage-3 work has also been recommended in clause 7.4.3 of TR 26.804:

4. For *Distributing DRM-protected, encrypted and high-value content* as introduced in clause 5.10 and based on the conclusions in clause 6.10 of TR26.804.

The objective of this work item is to address the recommendations for stage-3 extensions of the studies FS\_AMD and FS\_MS\_NS\_Ph2 in the relevant specifications, primarily TS 26.510, TS 26.512 and TS 26.517, and based on the stage-2 extensions in TS 26.501 and TS 26.502. Specifically, the following objectives are identified:

2. Provide relevant extensions to the Stage 3 5G Media Streaming protocols:

d. For *distributing encrypted and high-value content* as introduced in clause 5.10 of TR 26.804:

i. Support the Content Protection Information Exchange Format (CPIX) as specified in ETSI TS 103 799 at reference point M2d.

ii. Support the DASH-IF Interoperability Points specified in DASH-IF IOP Part 6 at reference point M4d for both DASH and HLS.

iii. Specification of a Content Preparation Template format in TS 26.512  that can configure encryption content preparation tasks in the 5GMS AS.

iv. Support other relevant aspects resulting from stage-2.

3. For key topic address the following aspects:

a. Specify the required protocols or protocol extensions

b. Define relevant APIs

c. Specify the OpenAPIs YAML as well as other stage-3 API.

e. Address remaining stage-3 aspects.

4. Coordinate work with other 3GPP groups as needed. For details see clause 8.

5. Coordinate work with external organizations such as SVTA (primarily the DASH-IF WG), CTA WAVE, ISO/IEC JTC29 WG3 (MPEG Systems), 5G-MAG, DVB and/or IETF, as needed.

This document initiates the work topic for DRM. It is also considered to support the development of the DRM feature with parallel implementation in 5G-MAG Reference Tools.

In order to address the open issues documented in clause 5.10.5, the following aspects address a solution to the topics:

- Support for Content Protection Information Exchange Format (CPIX) as specified in ETSI TS 103 799 [143] at reference point M2d addresses open issues 1 and 2 identified in clause 5.10.5.

- Support for the DASH-IF Interoperability Points; Part 6 [144] at reference point M4d addresses open issue 3 identified in clause 5.10.5 for both DASH and HLS.

- Support for decryption and (re-)encryption tasks in the content preparation template tasks in the 5GMSd AS, specified using a Content Preparation Template provisioned in the 5GMSd AF via M1d and configuration in the 5GMSd AS via reference point M3d.

# Details from TR 26.804

To be completed

# Details from TS 26.501

To be completed.

# Proposal

It is proposed to:

* Progress the work during SA4#131-bis-e and identify relevant CRs, namely:
	+ Initiate a CR to TS 26.512 that includes the following aspects:
		- Define a content preparation template for encryption, possibly aligning with CPIX document structures
		- Address the relevant signaling on M4 in the manifest to provide the content protection signaling for DASH, and possibly HLS.
	+ Initiate a CR to TS 26.511 that includes the following aspects:
		- Changes to 26.511 to update potential missing pieces for sample entry and track formatting
* Initiate the work during the AHG period for SA4#132