SMPTE ST 429-6:2006
Amendment 1:2018

SMPTE STANDARD

D-Cinema Packaging – MXF Track File Essence Encryption

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Foreword

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Introduction

This section is entirely informative and does not form an integral part of this Engineering Document. The purpose of this document is to address a request from 35PM50 to modify the standard to facilitate their referencing by IMF. The changes shall not require modifications to D-Cinema implementations.

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Amendment

Upon approval of this amendment, ST 429-6:2006 shall be revised as follows:

General

References to:

SMPTE ST 377M

are replaced with:

SMPTE ST 377 or SMPTE ST 377-1

Section 1 Scope

Replace Section 1 Scope in its entirety with:

This standard defines a syntax for encrypted Track Files, i.e. MXF files containing a single Essence Track, and specifies a matching reference decryption model. It uses the AES cipher algorithm for essence encryption and, optionally, the HMAC-SHA1 algorithm for essence integrity.

This standard assumes that the cryptographic keys necessary to decrypt and verify the integrity of encrypted Track Files will be available upon demand. More precisely, it does not specify the fashion with which cryptographic keys and usage rights are managed.

In addition, this document does not address, but does not preclude, the use of watermarking, fingerprinting or other security techniques to provide additional protection.

Section 2 Normative References

Remove the following normative reference:

SMPTE 429-3-2006, D-Cinema Packaging — Sound and Picture Track File

Replace the following normative reference:

SMPTE 377M-2004, Television — Material Exchange Format (MXF) — File Format Specification

with:

SMPTE ST 377:2004, Material Exchange Format (MXF) — File Format Specification

SMPTE ST 377-1:2012, Material Exchange Format (MXF) — File Format Specification

Note: The reference to SMPTE ST 377:2004 (http://dx.doi.org/10.5594/S9781614827689) is intentional and reflects ongoing uses of this specification.

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