SMPTE ST 431-1-2006

DCI:

* SMPTE 372M Dual Link HD SDI
* **SMPTE 428-1: D-Cinema Distribution Master - Image Characteristics**
* **SMPTE 428-2: D-Cinema Distribution Master - Audio Characteristics**
* **SMPTE 428-3: D-Cinema Distribution Master Audio Channel Mapping and Channel Labeling**
* **SMPTE 429-6 D-Cinema Packaging – MXF Track File Essence Encryption**
* **SMPTE 330M Television – Unique Material Identifier (UMID)**
* SMPTE RP 431-2: D-Cinema Quality - Reference Projector and Environment
* SMPTE 372M Link 1.5 Gb/s Digital Interface for 1920x1080 and 2048x1080 Picture Formats
* **SMPTE430-1: D-Cinema Operations - Key Delivery Message**
* SMPTE430-2 D-Cinema Operation - Digital Certificate
* **SMPTE430-3: D-Cinema Operations- Generic Extra-Theater Message Format (SMPTE3385B)**
* SMPTE 430-4 D-Cinema Operations - Log Record Format Specification for D-Cinema
* SMPTE 430-5 D-Cinema Operations - Security Log Event Class and Constraints for DCinema
* SMPTE 430-6 D-Cinema Operations - Auditorium Security Messages
* **SMPTE 433 "D-Cinema - XML Data Types"**
* **SMPTE 429-5 D-Cinema Packaging - Timed Text Track File**

MXF:

Base documents

* **SMPTE 377M: The MXF File Format Specification (the overall master document)**
* **SMPTE EG41: MXF Engineering Guide (A guide explaining how to use MXF)**
* **SMPTE EG42: MXF Descriptive Metadata (A guide explaining how to use descriptive metadata in MXF)**

### Operational patterns

* SMPTE 390M: OP-Atom (a very simple and highly constrained layout for simple MXF files)
* SMPTE 378M: OP-1a (the layout options for a minimal simple MXF file)
* SMPTE 391M: OP-1b
* SMPTE 392M: OP-2a
* SMPTE 393M: OP-2b
* SMPTE 407M: OP-3a, OP-3b
* SMPTE 408M: OP-1c, OP-2c, OP-3c

### Generic containers

* **SMPTE 379M: Generic Container (the way that essence is stored in MXF files)**
* SMPTE 381M: GC-MPEG (how to store [MPEG](http://en.wikipedia.org/wiki/MPEG) essence data in MXF using the Generic Container)
* SMPTE 383M: GC-DV (how to store [DV](http://en.wikipedia.org/wiki/DV) essence data in MXF using the Generic Container)
* SMPTE 385M: GC-CP (how to store SDTI-CP essence data in MXF using the Generic Container)
* SMPTE 386M: GC-D10 (how to store [SMPTE D10](http://en.wikipedia.org/wiki/SMPTE_D10) essence data in MXF using the Generic Container)
* SMPTE 387M: GC-D11 (how to store [SMPTE D11](http://en.wikipedia.org/wiki/SMPTE_D11) essence data in MXF using the Generic Container)
* **SMPTE 382M: GC-AESBWF (how to store** [**AES/EBU**](http://en.wikipedia.org/wiki/AES/EBU) **and Broadcast Wave audio essence data in MXF using the Generic Container)**
* SMPTE 384M: GC-UP (how to store Uncompressed Picture essence data in MXF using the Generic Container)
* SMPTE 388M: GC-AA (how to store A-law coded audio essence data in MXF using the Generic Container)
* SMPTE 389M: Generic Container Reverse Play System Element
* SMPTE 394M: System Item Scheme-1 for Generic Container
* SMPTE 405M: Elements and Individual Data Items for the GC SI Scheme 1

### Metadata, dictionaries and registries

* SMPTE 380M: DMS1 (a standard set of descriptive metadata to use with MXF files)
* SMPTE 436M: MXF Mappings for VBI Lines and Ancillary Data Packets
* *SMPTE RP210: SMPTE Metadata Dictionary (the latest version is available here:* [*http://www.smpte-ra.org/mdd/index.html*](http://www.smpte-ra.org/mdd/index.html) *)*
* *SMPTE RP224: Registry of SMPTE Universal Labels*