FREE TV AUSTRALIA OPERATIONAL PRACTICE OP-52

Digital File Format for Delivery of Commercials - MXF

Issue 2 Effective 1 March 2017 Page 1 of 3

1. SCOPE

This Operational Practice outlines the file format specifications to be used for the delivery of a commercial as a file on either a physical or electronic medium. If a physical medium is used then this document also specifies the number of commercials on each medium.

All other aspects of digital delivery of commercials are defined by OP-29. This includes video, audio and closed caption requirements, quality considerations, commercial timing, alignment signals, commercial identification and the delivery system requirements.

2. REFERENCES

This Operational Practice references the following documents:

AS/NZS 13818.1:2002 Information technology – Generic coding of moving pictures and associated audio information. Part 1: Systems

AS/NZS 13818.2:2002 Information technology – Generic coding of moving pictures and associated audio information. Part 2: Video

AS/NZS 13818.3:2002 Information technology – Generic coding of moving pictures and associated audio information. Part 3: Audio

SMPTE 377M – 2004 Material Exchange Format (MXF) - File Format Specification SMPTE 378M-2004, Material Exchange Format (MXF) -- Operational pattern 1A (Single Item, Single Package)

SMPTE 381M – 2005 Material Exchange Format (MXF) - Mapping MPEG Streams into the MXF Generic Container (Dynamic)

SMPTE RP210.8 – 2004 Metadata Dictionary Registry of Metadata Element Descriptions

SMPTE 335M – 2001 Metadata Dictionary Structure

SMPTE 302M – 2002 Mapping of AES3 Data into MPEG-2 Transport Stream

Free TV Australia OP-29 Digital Delivery Formats For Commercials

3. COMMERCIALS DELIVERED IN A FILE FORMAT

3.1. File Format Specification for HDTV television commercials

The following specification for the file format of a HDTV television commercial is provided as a guideline. File formats for a specific commercial television broadcaster shall be by agreement between the Distributor and the Broadcaster.

Resolution	Video Bit rate	Aspect Ratio	Video codec	Audio Bitrate	Audio codec	No. of Audio Channels	Wrapper
1920x1080/50i	50Mbps	16:9	MPEG-2 Long- GOP	768Kbps per channel	PCM	8	.mxf OP1a

3.2. File Format Specification for SDTV television commercials

The following specification for the file format of a SDTV television commercial is provided as a guideline. File formats for a specific commercial television broadcaster shall be by agreement between the Distributor and the Broadcaster.

Resolution	Video Bit rate	Aspect Ratio	Video codec	Audio Bitrate	Audio codec	No. of Audio Channels	Wrapper
720x576/50i	30Mbps	16:9	MPEG-2 I-Frame	768Kbps per channel	PCM	8	.mxf OP1a

3.3. Number of Commercials Delivered on Physical Medium

If delivery of commercials is via a physical medium, then the maximum number of commercials delivered on a single unit should be agreed by all parties (distributor and destination).

3.4. Distribution Method

The distribution method used for the delivery as a file should be agreed by all parties (distributor and destination) and must comply with all details of this interim specification. Refer Free TV Operational Practice 29.

4. SPECIFICATION OF COMMERCIAL IDENTIFICATION

- 4.1 Each individual television commercial / advertisement shall have some form of identification, such as an associated XML file refer Annex A for the fields required in the XML file. Legibility of the identification is most important to commercial television broadcasters.
- 4.2 The identification should contain information on:
 - a) Client / Advertiser
 - b) Agency / Production Company
 - c) Product
 - d) Title
 - e) Key Number
 - f) Duration (in seconds)
 - g) CAD Number / CAD Number Pending
 - h) Classification as provided by CAD / CAD Number Pending
 - i) Video format SDTV
 - j) Video format HDTV
 - k) Audio Loudness Level and Compliance to Free TV OP48 (-24LKFS)¹
 - Audio format (Stereo)
 - m) Audio format (5.1 Surround)
 - n) Aspect ratio (always 16:9)
 - o) Closed captions
 - p) Date (delivery date)



Annex A

1.XML FILE REQUIREMENTS FOR IDENTIFICATION OF A TELEVISION COMMERCIAL

XML format for SD and HD commercials:

- <Client / Advertiser> Text
- <Agency / Production Company> Text
- <Pre><Pre>coduct> Text
- <Title> Text
- <Key Number> alphanumeric
- <Duration (in seconds)> XX
- <CAD Number> CAD Number / CAD Number Pending
- <Classification> as provided by CAD / CAD Number Pending
- <Video format> SDTV
- <Video format> HDTV
- < Audio Loudness Level and Compliance to Free TV OP48 (-24LKFS)> Yes
- <Audio format (Stereo> Yes / No
- < Audio format (5.1 Surround)> Yes / No
- <Aspect ratio (always 16:9)> 16:9 (preferred) or 16x9 (note lower case 'x")
- <Closed captions> Yes / No
- <Date (delivery date)> DD/MM/YYYY