



To_Amsterdam: Delivery Specs

VIMN Internal Use Only

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MXF Test Plan

Shortform: Interstitial, Videoclip, and Commercial

No Slate

No Freeze Frames

No Black Frames

Longform: Programme

No slate

Where a commercial break is to be in file, please include either:

Freeze frames > 5 seconds

Black frames > 5 seconds

**** This will ensure Baton soft parts the file correctly during QC ****

HD File Delivery

Container

Format:	MXF / Media Exchange Format
Codec:	XDCAM HD422 / Apple Pro Res 422 HQ
Profile:	OP1a
Format settings:	MXF files must be closed Partitions can be complete or incomplete
Duration:	All material components must be of exactly the same duration
Timecode:	Synchronous to recorded video All timecodes are accepted (unless end is passing 23:59:59:24)
Essence allocation:	Video must be the first essence, audio second (and third, fourth, and so on...)

Video Essence:

Type:	High Definition
Format:	MPEG2
Compression:	422P@high level Square pixel
Width:	1920
Height:	1080
Scan type:	Interlaced
Frame rate:	25fps / PAL
Bitrate:	50Mbps
Bitrate mode:	CBR / Constant Bitrate
Field order:	UFF / Upper (Top) Field First
Bit depth:	8bit
Chroma subsampling:	4:2:2
GOP structure:	longGOP / N=12
Aspect ratio:	16F16 / 16:9 full frame
Title/graphic safe area:	An area of 95% is mandatory!

The following criteria apply:

- luminance levels should not exceed 100 IRE units
- chrominance levels should not exceed 100 IRE units in bars and 120 IRE units in programme
- set up level should not exceed 7.5 IRE units (analog) and zero IRE units (digital)

Content is considered HD when at least 75% is native HD (1920x1080).

Please do not upscale any SD material to HD prior to delivery.

Audio Essence:

Format: PCM (discrete AES-3)
Audio mode: 2 tracks – 1 discrete channel for Left or Right (per track)
Stereo
Bitrate mode: CBR / Constant Bitrate
Sampling rate: 48.0 kHz
Channel configuration: 8 channels
Bit depth: 24 bit

Or

Format: PCM (interleaved BWF)
Audio mode: 1 track – 2 interleaved channels for Left + Right
Stereo
Bitrate mode: CBR / Constant Bitrate
Sampling rate: 48.0 kHz
Bit depth: 24 bit

The audio essence(s) contained in the MXF container shall be locked to the video essence, and confirm SMPTE RP-155 for reference level and headroom. No noise reduction or pre-emphasis shall be used.

Audio sync relative to video shall not deviate by more than -15ms or +15ms!

Please always deliver a stereo M&E track where possible. This may be required for localization/dubbing.

Loudness:

Program loudness: -23 LUFS / LKFS
Maximum peak level: -1 dB_{tp}
Maximum loudness range: 20 LU
Maximum momentary loudness: No limit
Maximum short term loudness: No limit

SD File Delivery

Container

Format:	MXF / Media Exchange Format
Codec:	IMX 50/625 / Apple Pro Res 422
Profile:	OP1a
Format settings:	MXF files must be closed Partitions can be complete or incomplete
Duration:	All material components must be of exactly the same duration
Timecode:	Synchronous to recorded video All timecodes are accepted (unless end is passing 23:59:59:24)
Essence allocation:	Video must be the first essence, audio second (and third, fourth, and so on...)

Video Essence:

Type:	Standard Definition
Format:	MPEG2
Compression:	422P@high level 1.4587
Width:	720
Height:	576
Scan type:	Interlaced
Frame rate:	25fps / PAL
Bitrate:	50Mbps
Bitrate mode:	CBR / Constant Bitrate
Field order:	UFF / Upper (Top) Field First
Bit depth:	8bit
Chroma subsampling:	4:2:2
GOP structure:	I-frame only
Aspect ratio:	16F16 / 16:9 full frame
Title/graphic safe area:	An area of 95% is mandatory!

The following criteria apply:

- luminance levels should not exceed 100 IRE units
- chrominance levels should not exceed 100 IRE units in bars and 120 IRE units in programme
- set up level should not exceed 7.5 IRE units (analog) and zero IRE units (digital)

Audio Essence:

Format: PCM (discrete AES-3)
Audio mode: 2 tracks – 1 discrete channel for Left or Right (per track)
Stereo
Bitrate mode: CBR / Constant Bitrate
Sampling rate: 48.0 kHz
Channel configuration: 4 channels
Bit depth: 24 bit

Or

Format: PCM (interleaved BWF)
Audio mode: 1 track – 2 interleaved channels for Left + Right
Stereo
Bitrate mode: CBR / Constant Bitrate
Sampling rate: 48.0 kHz
Bit depth: 24 bit

The audio essence(s) contained in the MXF container shall be locked to the video essence, and confirm SMPTE RP-155 for reference level and headroom. No noise reduction or pre-emphasis shall be used.

Audio sync relative to video shall not deviate by more than -15ms or +15ms!

Please always deliver a stereo M&E track where possible. This may be required for localization/dubbing.

Loudness:

Program loudness: -23 LUFS / LKFS
Maximum peak level: -1 dB_{tp}
Maximum loudness range: 20 LU
Maximum momentary loudness: No limit
Maximum short term loudness: No limit