FILE DELIVERY POLICY (1/6)

Effective Date: January 2027

This document covers the technical requirements for commercials and billboards delivered to Bionic Media. Bionic Media holds the right to amend the requirements as a consequence of applicable rules and regulations.

All materials can only be delivered on our FTP server. Please use the right protocol specified below.

If the requirements included in this document are not fulfilled, Bionic Media holds the right to reject or adjust the files received.

Delivery details

Files should be delivered as follows:
Server: sftp.be.emglive.com
Login: Bionic
Password: m73h2qd4hJ
Protocol: SFTP
Port: 22 (not 21)

All files should be available no later than five (5) working days prior to the start of each campaign. Deadline before 12am.

Always use the ID provided by the Bionic planning. This ID has the form of BH0 followed by the 6 numbers. Use a name following the convention described at the end of this document.

Each delivery always consists of two files: (i) the file containing video & audio, and (ii) the file containing metadata.

Video and audio files delivered must at least comply with the following standards and recommendations: SMPTE 377M-2009, SMPTE 378M-2004, SMPTE 379M-2010, SMPTE 381M-2005, SMPTE 382M-2007, ITU-R BT.709-5-2004, ITU-R BT.1702-2005, EBU R122-2007, EBU R128-S1-2016, RDD 9-2009.

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Video

a) Format

The framerate is 25 frames and 50 fields per second (1080i/25) with a resolution of 1920x1080. The video codec is MPEG-2 XDCAM HD422 Long GOP 50 (50 Mbit/sec).

b) Aspect ratio

The primary format for the material is 16F16, filling a 16:9 screen vertically and horizontally without geometric mismatch. Sub-formats which can be viewed without distortion in 16F16 are permitted. The aspect ratio must be marked identically in MPEG essence, MXF metadata as well as the metadata file. In the case of the active picture ratio being 2.35:1 (21:9) or 1.85:1, the picture should be centred vertically between black bars in a 16:9 frame, filling the width of the frame with no geometric distortion.

c) Additional signals

It is not allowed to add a watermark or hidden signals to audio, image or other aspects of the file. Ancillary data enclosed in the horizontal or vertical blanking interval is ignored.

d) Illegal colours

Illegal colours may not be present in the video signal. ITU R BT.709-5 will be strictly enforced.

e) Field dominance

A complete video frame must consist of an odd line filed followed by an even line field. Cuts in material must happen on frame boundaries (between field 2 and field 1).

f) Time code

The file shall feature one continuous, ascending time code as defined according to the time code track of the MXF file. The time code of the MPEG-2 GOP headers must also be continuous and shall correctly indicate the coded image sequence. Any VITC in the recording will be ignored. The time code in the metadata file includes start and stop and must be synchronised with the time code in the MXF file.

g) Picture quality

The picture must be well lit and reasonably but not artificially sharp. It needs to be free of excessive noise, grain and digital compression artefacts, flare, reflections, lens dirt, markings and obstructions, lens aberrations, black crushing and highlight compression. Hard clipping of highlights by legalisers shall not cause visible artefacts on screen. Movement needs to appear reasonably smooth and continuous and must not give rise to distortions or break-up to moving objects or cause substantial changes in resolution. There shall be no noticeable horizontal or vertical aliasing, for example jagged lines and field or frame rate fluctuations. Colour rendition, especially skin tones, must be consistent throughout and be a realistic representation of the scene portrayed, unless it is altered as an editorially essential visual effect. There shall be no visible contouring, quantisation noise or artefacts caused by digital processing. Noticeable spurious signals or artefacts, for example streaking, ringing, smear, echoes, overshoots, moiré, hum or crosstalk shall not be visible. Electronically generated moving graphics and effects such as rollers, moves, wipes, fades and dissolves added to interlaced video in post-production must be generated as interlaced as well to prevent unacceptable judder.

h) Photosensitive epilepsy

Flickering or intermittent images and certain types of regular patterns can cause problems for viewers with photosensitive epilepsy. Supplier must take all precautions following the ITU-R BT.1702 guideline.

Audio

a) Format

The coding of the audio channels is PCM 24 bit@48 kHz.

b) Channel layout

Stereo audio in eight channels (four AES pairs, eight tracks): 1 = Left Stereo (Lo/Lt), 2 = Right Stereo (Ro/Rt), 3 = Mute, 4 = Mute, 5 = Mute, 6 = Mute, 7 = Mute, 8 = Mute.

c) Audio channel distribution

Channels 1 and 2 form a stereo pair. In case of mono audio, the Left channel must be identical to the Right channel. All audio channels must be synchronized.

d) Loudness level

The loudness level of the content must comply with EBU R128 and its supplement S1 for short form content, based on the following specifications:

Program Loudness: -23.0 LUFS (+/- 0,5 LU)

Maximum True Peak Level: -1 dBTP

Maximum Momentary Loudness: No restriction

Maximum Short-Term Loudness: +5 LU

Maximum Loudness Range: No restriction

Limitations of the modulations are determined using the Maximum Short-Term Loudness parameter. Mixing techniques and added signals that deliberately lead to considerable loudness differences between multi-channel surround audio and its derived down-mix or which lead to manipulation of the loudness measurement in general are forbidden.

e) Low loudness level content

A production may consciously use low level audio, for example, in content that consists mainly or entirely of background sounds. This is a creative option which for this purpose is supported by the addition of the 'LOW_LOUDNESS_LEVEL' parameter in the metadata file. If the submitting party assigns this parameter the value TRUE, the ingest process accepts that material has a lower program loudness level than -23 LUFS.

f) Audio quality

Sound must be recorded with appropriately placed microphones, giving minimum back-ground noise. The audio shall have no peak level clipping and be free of spurious signals such as clicks, hum and any other avoidable distortion. The sound needs to be consis-tently mixed and edited. Speech must be acquired and mixed so that it is clear and easy to understand while listening on the same comfortable listening level and must not bel ouder than the average speech level of programs. Loudness levels must be appropriate to the scene portrayed, suitable for domestic listening situations. The audio must not show dynamic and/or frequency response artefacts because of noise reduction or low bit rate coding. The timing difference between sound and vision shall not cause any perceptible error.

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Length

The length in time of image and audio data must be identical to the content and must be identical to the length recorded in the metadata file. In other words: there is no pre or post presentation containing a coloured bar, slate, or black. Any other versions of the content must be provided in a separate submission.

The metadata file: Data about the commercial (the metadata) is recorded in an XML File (example below):

<?xml version=”1.0” encoding=”utf-8”?> <COMMERCIAL_DETAILS>
<TITLE>Bionic</TITLE>
<!--The unique title of the commercial-->
<PRODUCT>Sample</PRODUCT>
<!--Name of the product being promoted-->
<VERSION>1</VERSION>
<!--Version number of the spot increment by one-->
<ADVERTISER>Bionic</ADVERTISER> <!--Name of the advertiser-->
<LENGTH>60</LENGTH>
<!--Length of the commercial in seconds-->
<TC_IN>00:00:00:00</TC_IN>
<!--exact timecode of the first frame of video (should always be 00:00:00:00)-->
<TC_OUT>00:00:59:24</TC_OUT>
<!--exact timecode of the last frame of video-->
<ASPECT_RATIO>16F16</ASPECT_RATIO> <!--aspect ratio, should always be 16F16-->
<AGENCY>unknown</AGENCY> <!--name of the agency-->
<PRODUCTION_COMPANY>unknown</PRODUCTION_COMPANY> <!--name of the technical production company-->
<COMMENTS></COMMENTS>
<EMAIL_CONFIRMATION>Hans- Peter.Lehnhoff@rafc.com</EMAIL_CONFIRMATION> contact for the spot-->
<HD>TRUE</HD> <!-- FIXED-->
<MULTI_CHANNEL_AUDIO>FALSE</MULTI_CHANNEL_AUDIO> <!-- FIXED-->
<LOW_LOUDNESS_LEVEL>FALSE</LOW_LOUDNESS_LEVEL > <!-- FIXED-->
</COMMERCIAL_DETAILS> “
<!--email of technical contact>

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File naming convention

The name of the MXF file and its related metadata file must be the identical, except for the file extension.

File names must consist of the UTF-8 character set, using numbers (0-9), upper case letters (A-Z), lower case letters (a-z) and hyphens. Characters with diacritical marks such as é, è, ë or ö may not be used. Spaces are not permitted in filenames and must be replaced by a hyphen (-). Text is not case sensitive. The maximum length of the entire file name is 100 characters.

The (_) character is used exclusively as separator.
The extension for the MXF file with the material must be “mxf”. The extension for the related metadata file is “xml”