

Viasat Broadcasting UK Ltd

Technical Specification for Commercials and Sponsorship
Delivered by Digital File

INTRODUCTION

If the following criteria are not met Viasat will reject material

All commercials must arrive in London at least 3 working days prior to transmission.
Commercial durations to be 10, 15, 20, 25, 30, 40, 50, 60 second lengths, as standard.

VIDEO

Video levels are based on the PAL System I which specifies 0 to 100% RGB Limits.
We require that signals meet the easier EBU Recommendation R103-2000:

Luminance limits -1% and 103%
Chrominance 105% max - RGB values to not exceed limits -5% to +105%.

Commercial video content shall be presented at 16:9 FHA aspect ratio.
All material needs to be 4:3 compatible and safe areas should be respected on all material.

AUDIO

Audio track 1 stereo left (Stereo preferred, but mono is acceptable.)
Audio track 2 stereo right

Line up test tones shall at the start of tape shall be recorded at:

1kHz (125nW/m) for metal analogue tape corresponding to $OdBu = 0.775V_{rms}$ sine-wave.
1kHz (-18dBFS) for Digital Betacam tape corresponding to $OdBu = 0.775V_{rms}$ sine-wave.

Audio peaks should not exceed 4dBu above $OdBu$ reference level for analogue, or not to exceed 4db above EBU Digital reference level of -18dBFS.

The commercial's loudness should be within the range of -22 to -18 dBFS according to Leq (A)
(IEC 60804), measured with Dolby LM100 in short mode, digital input

FILE FORMAT

Commercial content is to be delivered in electronic files in the following format(s). Deviation from these formats is not allowed and any material or files delivered in alternative formats will be rejected.

All Video material is to be delivered as per the format above, compressed with MPEG2 4:2:2 I frame only with a bitrate of 30 Mbps (MainLevel@4:2:2Profile), and uncompressed wave interleaved 24 bit stereo audio at 48kHz.

The files to be delivered, hereafter called essence files, will be required to be sent as set out in the table below.

Directory and File structure	File name	File format	Format Specification
	[HseNo].dir	.dir (directory)	n/a
	[HseNo].mov	.mov Quicktime 7 movie	Quicktime 7 referenced MOV file wrapper
	Media.dir	.dir (directory)	n/a
	[HseNo].m2v	.m2v IMX or MPEG2 video file	MPEG2, ML@4:2:2 profile, 30 Mb/s, 1 frame only, IMX, D-10 profile
	[HseNo]_L.wav	.wav Audio left, WAV file	PCM audio, 48kHz, 24 bit Mono (discreet)
	[HseNo]_R.wav	.wav Audio right, WAV file	
	[HseNo].xml	.xml File containing metadata	Full specification available separately

Supplier will provide example files of with correct attributes on request.

LENGTH OF DELIVERED MATERIAL

Each commercial shall include a top of 10 seconds with product identifier and a tail of 20 seconds with black and silence.

The top is formatted as follows:

7 seconds of identifier (175 frames)

3 seconds of black and silence (75 frames)

Each commercial shall also include a tail of 20 seconds formatted as follows

20 seconds of black and silence (500 frames)

The delivered spot will therefore have the following format:

Identifier	Black / silence	Active Content	Black / silence
7 seconds	3 seconds	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60 seconds	20 seconds

DELIVERY TO BROADCASTER FROM SUPPLIER

A delivery consists of the successful arrival of all subscribed files, verified by checksum comparison with the master files, to the designated folder on the Broadcasters server or servers and verification of the successful arrival by the broadcaster.

TIMECODE

Time code is not part of the essence package, but the wrapper files will contain metadata specifying a start timecode for the media of 04:59:50:00. Start of spot derived from this metadata will always be 05:00:00:00.

LANGUAGE IDENTIFICATION

For each clip languaging is defined in 3 locations, the mov header file, the XML file and wav file naming convention. In all cases, language specification must be uniform across the 3 locations for every clip delivery instance.

For commercials language should be defined as original, known as 'oriL' and 'oriR' within the mov header file.

XML METADATA

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
-<Pharos xmlns:fo="http://www.w3.org/1999/XSL/Format">
-<Material>
  <MatID>Housenumber</MatID>
  <Title>Nameofcommercial</Title>
  <Duration>00:00:40:00</Duration>
  <AspectRatio>16:9</AspectRatio>
  <MaterialType>Commercial</MaterialType>
-<Track>
  <FileID>Housenumber</FileID>
  <Incode>04:59:50:00</Incode>
  <Outcode>05:00:30:00</Outcode>
  <MediaName>XXX</MediaName>
  <Encoded>Yes</Encoded>
-<TrackDefinition>
  <TrackTypeName>Video</TrackTypeName>
  <Position>1</Position>
</TrackDefinition>
-<TrackDefinition>
  <TrackTypeName>Ori L</TrackTypeName>
  <Position>2</Position>
</TrackDefinition>
-<TrackDefinition>
  <TrackTypeName>Ori R</TrackTypeName>
  <Position>3</Position>
</TrackDefinition>
</Track>
-<TrackTypeLink>
  <TrackTypeName>Video</TrackTypeName>
  <UserName />
  <StateId>4</StateId>
  <StateMachineId>1</StateMachineId>
  <StateName>Spot check Required</StateName>
  <StateMachine>Viasat workflow</StateMachine>
</TrackTypeLink>
-<TrackTypeLink>
  <TrackTypeName>Ori L</TrackTypeName>
  <UserName />
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  <StateMachineId>1</StateMachineId>
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  <StateMachine>Viasat workflow</StateMachine>
</TrackTypeLink>
-<TrackTypeLink>
  <TrackTypeName>Ori R</TrackTypeName>
  <UserName />
  <StateId>4</StateId>
  <StateMachineId>1</StateMachineId>
  <StateName>Spot check Required</StateName>
  <StateMachine>Viasat workflow</StateMachine>
</TrackTypeLink>
-<Owner>
  <Name>Viasat</Name>
</Owner>
</Material>
-<Request>
  <MatID>Housenumber</MatID>
  <DestinationMedia>IngestOmneon</DestinationMedia>
  <Status>Submitted</Status>
</Request>
</Pharos>
```