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## BULGARIA

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### BULGARIA WHITE PAGES | FILE SPECIFICATIONS

To maintain a consistently high quality product Adstream requires all material for distribution in this region to be supplied to the following specifications:



#### File Specification

Apple ProRes 422HQ 1080/50

Video:

Codec : Apple Quicktime ProRes 422 (HQ)  
Container : MOV  
Profile : HQ  
Chroma Subsample : 4:2:2  
Interlacing : Upper/TFF  
Frame Size : 1920x1080  
Frame Rate : 25 FPS  
Aspect Ratio : 16:9

Audio:

Codec : PCM (Little Endian)  
Sample Rate : 48kHz  
Sample Size : 24bit  
Channels : Stereo

MXF Wrapped XDCAM  
1080/50

Video:

Codec : XDCAM 422  
Container : MXF  
Profile : MPEG-2 422P@HL  
Bitrate : 50Mb/s CBR  
Chroma Subsample : 4:2:2  
Interlacing : Upper/TFF  
GOP Structure : Long GOP  
Frame Size : 1920x1080  
Frame Rate : 25 FPS  
Aspect Ratio : 16:9

Audio:

Codec : PCM (Big/Little Endian)  
Sample Rate : 48kHz  
Sample Size : 24bit  
Channels : Stereo

MPEG-2 Transport Stream 1080/50

Video:

Codec : MPEG-2  
Container : MPEG-2 Transport Stream  
Profile : 422P@HL  
Bitrate : 100Mb/s CBR  
Chroma Subsample : 4:2:2  
Interlacing : Upper/TFF  
GOP Structure : I Frame Only  
Frame Size : 1920x1080  
Frame Rate : 25 FPS  
Aspect Ratio : 16:9

Audio:

Codec : PCM  
Sample Rate : 48kHz  
Sample Size : 24bit  
Channels : Stereo



#### Video Level Requirements

TV Format : HDTV

Aspect Ratio : 16:9

Title Safe : 16:9 as per EBU R.95-1

All Video Signals Should Comply With ITU-R  
BT.709-5 And Video Signals Should Not Exceed  
The Specified Limits

Video Levels Should Not Exceed 700mV, Or Fall  
Below 0mV

Out of gamut tolerance

Whilst Adstream and the Broadcasters will reject  
illegal video levels they understand there may be  
instances where it is difficult to completely avoid,  
and following EBU recommendation Rec.103-2000  
will allow a small tolerance, assuming that no more  
than 1% of the active picture is in error.

- Luminance (Y) -1% and 103%  
(ie between -7mV and 721mV)
- RGB video levels -5% and 105%  
(ie between -35mV and 735mV)



#### Audio Level Requirements

Depending on the final destination, the SCE region  
accepts audio mixed as either:

PPM / Max Peak

- Permitted Maximum Level : PPM 6 (-10dBFS)
  - Alignment Level : 1kHz@ -18dBFS
  - Ballistic : PPM Type IIa as per IEC 60268-10
- Refer to EBU R68-2000 for guidance on alignment  
levels

Croatia, Malta, Slovenia and Bulgaria:

Files should always be R128

EBU R.128-2014

- Integrated Loudness Program : -23 LUFS
- Target Level Tolerance : +/- 0.5 LU
- Maximum True Peak : -3dBTP
- Maximum Momentary : -15 LUFS



*File Specification*

Apple ProRes 422HQ 625/50

Video:

Codec : Apple Quicktime ProRes 422 (HQ)  
Container : MOV  
Profile : HQ  
Interlacing : Upper/TFF  
Frame Size : 720x576  
Frame Rate : 25 FPS

Audio:

Codec : PCM (Little Endian)  
Sample Rate : 48kHz  
Sample Size : 16/24bit  
Channels : Stereo

MPEG-2 Program Stream 625/50

Video:

Codec : MPEG-2  
Container : MPEG-2 Program Stream  
Profile : 422P@ML  
Bitrate : 50Mb/s CBR  
Chroma Subsample : 4:2:2  
Interlacing : Upper/TFF  
GOP Structure : I Frame Only  
Frame Size : 720x576  
(608 Inc VBI)  
Frame Rate : 25 FPS

Audio:

Codec : MPEG1 Layer-2  
Sample Rate : 48kHz  
Sample Size : 16 bit  
Channels : Stereo



#### Video Level Requirements

TV Format : PAL

Aspect Ratio : 4:3 and 16:9

Title Safe : 4:3 / 16:9 as per EBU R.95-1

All Video Signals Should Comply With ITU-R BT.601-7 And Video Signals Should Not Exceed The Specified Limits

Video Levels Should Not Exceed 700mV, Or Fall Below 0mV

Out of gamut tolerance

Whilst Adstream and the Broadcasters will reject illegal video levels they understand there may be instances where it is difficult to completely avoid, and following EBU recommendation Rec.103-2000 will allow a small tolerance, assuming that no more than 1% of the active picture is in error.

- Luminance (Y) -1% and 103%  
(ie between -7mV and 721mV)
- RGB video levels -5% and 105%  
(ie between -35mV and 735mV)

Content delivered as 16:9 will be converted to 16:9 Letterbox for 4:3 destinations if an alternate version is not supplied.



#### Audio Level Requirements

Depending on the final destination the SCE region accepts audio mixed as either:

PPM / Max Peak

- Permitted Maximum Level : PPM6 (-10dBFS)
- Alignment Level : -18dBFS
- Ballistic : PPM Type II

Refer to EBU R68-2000 for guidance on alignment levels and permitted maximum levels Croatia, Malta, Slovenia and Bulgaria:

Files should always be R128

EBU R.128-2014

- Integrated Loudness Program : -23 LUFS
- Target Level Tolerance : +/- 0.5 LU
- Maximum True Peak : -3dBTP
- Maximum Momentary : -15 LUFS

#### Clock/Slate and Pre & Post Roll Information

|     | Duration | Example Timecode          |
|-----|----------|---------------------------|
| TVC | 30"      | 00:00:00:00 - 00:00:29:24 |

#### Clock/Slate Information

For this region a valid clock/slate is Not Required

File naming should be: *ClockNumber\_Product* or *Product\_Title\_Duration\_Audio*

The clock number on the order must contain a maximum of 20 characters

It is advised to use the layout **BBB-PPPNNN-DDD** where:

- B : Brand/Agency
- P : Product
- N : Unique Sequential ID Number
- D : Duration

#### Further Audio Guidance:

- Content delivered mixed to max peak ('R68'/PPM) can be converted to meet the EBU R128 program loudness requirements.

- Care must be taken when converting from R128 to 'R68'/max peak, as this may result in unintentionally low audio levels.

Where required this will be normalised to meet the correct program loudness.

**Bulgaria: Files should always be R128**

**Additional Information:**

TVC duration must be to the complete number of frames.

For example at 25fps the number of frames for a 30" TVC will need to be 750 frames.