

**File Delivery to Together TV**

HD files should always be supplied:

**1920 x 1080 resolution**

**Sq pixels**

**25fps**

**interlaced – Upper Frame First**

**Audio: uncompressed linear PCM 48Khz 24bit**

Films can be originated as either interlaced or progressive but should be delivered as interlaced. Electronically generated moving graphics and effects (such as rollers, DVE Moves, wipes, fades and dissolves) must be generated and added as interlaced to prevent unacceptable judder.

**File formats**

Our preference is for delivery as DPP compliant AS11 .mxf files. We can also accept films delivered in other intra-frame codecs (where each frame is compressed independently without reference to other frames (unlike inter-frame codecs e.g. mp4 - H.264 or mpeg2).

**The following intra-frame file types are acceptable:**

**MXF OP1a file wrapper .MXF**

Video essence:

* AVC Intra Class 100
* Avid DNxHD 120, 185 or 185x

or DNxHD SQ, HQ, HQX in Avid’s new naming convention

**Quicktime file wrapper .Mov**

Video Codecs:

* Apple Pro Res 422HQ
* Apple Pro Res 422
* Avid DNxHD 120, 185 or 185x

or DNxHD SQ, HQ, HQX in Avid’s new naming convention

**Picture and Sound Levels**

**Picture levels** should conform to standard RGB and Luminance levels as defined under EBU R 103 as follows:

* **RGB components must be between -5% and 105%\* (-35 and 735mV)**

and

* **Luminance Y must be between -1% and 103% (-7mV and 721mV)**

**Sound levels** should conform to standard loudness levels as defined under EBU R 128:

* **Programme loudness must not exceed -23LUFS +/- 0.5LU**
* **Maximum true peak level should not exceed -3dbTP**

**On screen Text**

Text should be clearly legible and the use of Serif fonts should be avoided. Text must always be placed within the title safe area of the screen:

* **Text within 90% of active width and 90% of active height**

**Subtitles**

As an inclusive TV broadcaster, we actively encourage you to provide us with subtitles.

Where possible, please supply your video accompanied by a subtitle file. We can handle most common formats including SRT, STL, TTML and more.

Preferably, please do not provide us with open captions where subtitles are burnt into the picture.

**Notes:**

If files can’t be adjusted quickly by Together TV to meet the above technical standards they may be rejected as unsuitable for broadcast. Delivery in a file format other than those listed in this document should be with prior arrangement. A more detailed tech spec document is available and if in doubt please get in contact to discuss matters before delivering.

NG/FA

10/22