APPENDIX B

2016 Selected Film Technical Rules & Regulations

- Deliver your Exhibition Copy to the Festival office on or before August 19, 2016. Deliveries directly to venues will not be accepted.
- <u>You are solely responsible for the production quality of your Exhibition Copy</u>. Festival DCP validation is an integrity check to verify hard drive formatting, integrity of data (checksums), xml schema check, and adherence to DCI and SMPTE specification. The Festival expects that prior to sending your film, you have screened your finished DCP in a theatrical environment and have already verified that production values including, but not limited to, colour reproduction, audio sync, playback level, are as expected and intended. The Festival has no obligation upon receipt to confirm that your content "looks good" or "sounds good". The Festival will not make compensatory adjustments for unconventional picture or sound calibration. In summary, the Festival will ensure that your hard drive is formatted correctly and can be loaded on all Festival servers and that your DCP is made correctly and does not risk failed screenings.

Exhibition Formats

Your Exhibition Copy must arrive in DCP format as described in this section. TIFF may, but is not required to, permit films within the Wavelengths and Cinematheque programmes to be screened in the following alternative formats: (i) 35 mm or (ii) HDCAM or iii) 16mm or iv) Apple Pro Res. No format exceptions will be made for the Short Cuts programme.

These regulations fully describe all of the Festival's requirements for accepting delivery of content in DCP format and it is imperative that they are read and understood by the parties creating your DCP, shipping your DCP and by those responsible for authorizing and creating your DKDM.

Main Technical Specifications

- It is possible to create DCP content that has critical errors using commercial or open source software. For this reason, it is imperative that you entrust the production of your DCP to an established and reputable post-production facility. Properly made DCI compliant content will load and play on all makes and models of Digital Cinema Server or Projector. If we identify errors or non-compliance to DCI or SMPTE specifications in your content and subsequently encounter a projection issue, the content will be deemed at fault. The Festival accepts no responsibility for lost screenings resulting from improperly made content, regardless of its previous screening history.

- 2K resolution or 4K resolution

- jpeg2000/mxf Interop or SMPTE package

- 24fps or 25fps only

- Subtitles that are burned into the image are the most reliable method of presenting subtitles and are preferred

- Timed Text Font and Font Call should be included inside the XML package

- Supplied fonts utilized for Timed Text must be smaller than 640 KB

- Subtitles must always be in the active picture area

- Audio: 5.1. "Stereo" mixes will be accepted but are discouraged as they are not decoded in playback and result in problematic dialogue reproduction. Audio should be 24 bit, 48 KHz sampling rate only. DCP's with 7.1 audio must also have a 5.1 version included as 7.1 is not supported in all Festival venues.

- Bit rate: The maximum bit rate of 250 Mbps must not be exceeded. Variable bit rate (VBR) encoding is preferred. Note: many software encoders will nominally exceed the maximum bit rate when set for highest bit rate output. For this reason, it is highly recommended that the max when encoding should be 245 Mbps.

- DCPs with Timed Text or PNG subtitles must be created using traditional reel breaks (approximately 20 minutes each). The duration of subtitle reels must match the duration of their associated picture reels.

- Reels of less than 5 seconds duration are not permitted. Please ensure that logo insertions are 5 seconds or greater in length.

- Encryption is optional. The Festival regularly handles a large volume of DCP content that does not require a KDM.

- Proper file naming convention of your file must be observed. See: http://digitalcinemanamingconvention.com/. Note that the "Content Title Text" is the reference by which content is identified on a server. If the Content Title Text does not correctly identify your content, your DCP will be rejected. If your DCP cannot be clearly identified when loaded to server, we will expect it to be re-wrapped.

- Annotation Text, CPL, and DKDM must all reference the same filename.

- No bars, tones, slates, countdown leader, advertising or trailers should be encountered on screen when your DCP is played from the beginning. Failure to do adhere to this will cause your DCP to be rejected.

- The container size MUST match the intended aspect ratio, i.e.

    o 1998x1080 for 1.85
    o 2048x858 for 2.39
    o 1920x1080 or 1998x1080 with pillarbox for 16:9
    o 2048x1080 for full container (1.9)
    o 1.37 and 1.66 are represented as pillarboxed variants of the 1.85 container and each have a picture height of 1080 pixels
    o There will be no compensation for the sizing of image on screen for aspect ratios that do not meet these pixel dimensions
    o For clarity, these pixel dimensions are expressed in reference to 2K content. For 4K equivalents, multiply each provided pixel dimension by a factor of 2

Hard Drive and Contents
- Two (2) identical copies of your DCP are required to meet Festival screening logistics. This does not apply to short films that appear in Short Cuts or Wavelengths programmes. By strict technical definition, DCPs that are considered identical must have a Compositional Playlist (CPL) UUID that is identical. If the CPL UUID does not match, the Festival will arbitrarily make the decision that the DCP with the most recent date stamp is the correct screening version and will treat the delivery as if a single DCP copy has been submitted and subject to the same penalty as a single copy being delivered.
- Supplied hard drives must only contain only the version (CPL) of the movie that is being screened at the Festival, with the following exceptions:
    o An Original Version package with the Version File for our Festival is acceptable provided that naming convention of files is strictly adhered to observing OV and VF suffixes and language/subtitle code in Content Title Text
    o If a 7.1 version is sent to us, we also expect a 5.1 version. The 7.1 version can consist of a 7.1 Version File to be used with a 5.1 Original Version file. Screenings in 7.1 will be considered but not guaranteed in the assignment of your film to its screening venues.
    o If your content is in two parts with two CPLs for an intended intermission, it is vitally important that you have the approval of our Programming department to do so prior to sending content.

- Hard drive- FEATURE LENGTH CONTENT:
  - Master Boot Record partition scheme. The supplied hard drive must contain only a single partition and the formatted partition with content in it must be the first primary partition record.
  - EXT 2 or EXT 3 (Linux) formatted
  - Hard drive mounted in a CRU (DX115) carrier
  - 3.5" 7200 RPM disk specification
  - NO OTHER HARD DRIVE/FILE SYSTEM WILL BE ACCEPTEDFOR FEATURE LENGTH CONTENT
- Hard drive- SHORT FILMS ONLY
  - Master Boot Record partition scheme. The supplied hard drive must contain only a single partition and the formatted partition with content in it must be the first primary partition record.
  - EXT 2 or EXT 3 (Linux) formatted
  - "thumb" drives will be accepted provided they met USB 3.0 date transfer specifications
- Temporary file transfers resulting from DCP content not meeting the correct hard drive specification will automatically be billed to the content provider at a fee of $250.00 CDN (plus 13% HST) for each of the two required hard drives.

Physical Packaging
- Your hard drive should be clearly labelled with the Film Title as it is referenced for Festival screenings as well as the Content Title Text ("file name"). Short films arriving on thumb drives should employ a "string tag" style of label for identification purposes. When providing two DCPs to meet feature length content delivery requirements, the DCP hard drives must be packed in their own individual shipping cases to accommodate the fact that multiple DCPs will be distributed to different Festival venues.
- Your hard drive should arrive in a sturdy robust container that has a rigid exterior and sufficient semi-rigid foam padding to protect the hard drive from rough handling in transport and be suitable for transportation between Festival venues. Hard shell plastic cases with a handle and latch mechanism are preferred.
- Do not pack hard drives with loose foam chips.

KDM/Encryption
- If your DCP is encrypted, you will be required to supply a DKDM to the Festival for the creation of the required KDMs for your Festival screenings. Server certificates and additional information regarding the generation of the DKDM will be provided no later than August 17, 2016. The DKDM will need to be open from the date the DCP is received through until September 18, 11:59pm.
- Deluxe Toronto Ltd. will be working with the Festival to create KDMs in a secure environment.
- The keys created for Festival screenings will be valid from September 6, 2016 to Sunday September 18, 2016 at 11:59pm in Festival venues.
- As security is a priority for us all, the Festival will make available a complete report upon request, listing every key that was generated from your DKDM.

Apple Pro Res- Wavelengths only
- Codec Apple ProRes 422, 10 bit sample depth, normal (147 Mbits/s) or HQ (220 Mbits/s). Colorspace/Gamma Rec. 709, 2.2
- Audio:
  - PCM, 24 bit, 48 Khz sampling rate.
  - Stereo or 5.1 discrete.
  - 5.1 discrete must follow channel order: L,R,C,LFE,Ls,Rs.
- Pixel geometry:
  - 1.33, 1.37, 1.66, 16:9, 1.85 aspect ratios to be provided full height in a container 1998 x 1080 pixels pillarboxed as required.
  - 2.35, 2.39 aspect ratios to be provided full height in a container 2048 x 858 pixels, pillarboxed as required for 2.35.
- Frame Rate
  - 24, 25, 30 progressive only. DROP FRAME (23.98 and 29.97) NOT ACCEPTED.

Late Delivery Penalties
- To ensure sufficient time to validate all DCPs, two identical hard drives of each DCP title, along with the DKDM if DCP is encrypted, **must** be received by August 19, 2016. Content providers delivering later than the August 19 deadline or failing to provide a DKDM will be billed an administrative fee of $350.00 CDN (plus 13% HST).

Accessibility: Visual and Hearing Impairment:
- TIFF is working towards providing a more inclusive Festival experience. As such, some of the screening venues will be equipped for the playback of closed captions and descriptive sound. TIFF strongly encourages content providers to deliver accessible version of their content, if available.

Replacement Versions

- TIFF is not obligated to accept replacement versions after the delivery deadline. The first version we receive will be considered the final version and be used for all Festival screenings.

Status Updates:
- Due to the high volume of content that the Festival handles, TIFF will <u>not</u> reply to individual queries regarding status updates on content.
- You will be notified promptly and given the opportunity to provide a replacement that corrects identified issues. Hard drives that arrive not to specification of type or format, however, will automatically be transferred to a temporary CRU drive and will incur a penalty of $250.00 CDN (plus 13% HST) without further notification.
- You may be presented the option to allow Deluxe Toronto Ltd. to correct your content, in which case a quotation for services rendered will be provided prior to any action taken.
- Failure to acknowledge or respond to notifications about remedying identified content issues puts your screenings at risk of being cancelled.

Return of Content:
The Festival requires at least 48 hours turnaround time to return your Exhibition Copy after the final screenings. While entrusted to the Festival, your Exhibition Copy is not available for non-Festival screenings.

Venue and Presentation Information:
All Festival cinemas are optimized to SMPTE standard prior to the Festival. Dolby Labs generously provides Dolby technicians to the Festival who will be assigned to screenings at the Festival's discretion.

Technical Questions:
Please address technical questions to: technical@tiff.net.