Normes techniques 2024-2025

High-definition (HD) video

Direction des opérations techniques
normestechniques@telequebec.tv

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⇒ **Acquisitions and original programming**

There must be 1 program per file. Any files encapsulating more than one program will be rejected.

Any dialogues in foreign language must be translated in French.

Original productions:
- All programs must be delivered as 1920x1080 with its original frame rate and scan type.

Acquisition:
- All programs must be delivered as 1920x1080 with its original frame rate and scan type.

- Neutral backgrounds as well as any other elements deemed relevant must be provided (e.g.: typography, After Effect or Photoshop project).

- For all films, a TV audio mix is required to comply with our audio standards (Section 3). If this mix is not available, delivery of the Stem files is requested.

⇒ **WEB EXCLUSIVITY AND TELE-QUEBEC EN CLASSE**

- All programs must be delivered as 1920x1080 with its original frame rate and scan type.

- 1 program per file.

- No lead-in and lead-out, program only.

⇒ A 5-minute test file may be requested before delivery of a program.

⇒ The file delivery method shall be by upload. To request access to our server for file delivery or for any other questions, please contact normestechniques@telequebec.tv.

All files delivered to Télé-Québec must meet the following technical criterias.

Please refer to the appropriate section to know all technical requirements specific to the chosen content format (point 6,7 &8)

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1.   FORMAT

There must be 1 program per file.

Tele-Quebec requests the following file format:

> • **XDCAM HD422 50 mb/s encapsulated MXF OP1a - Audio format PCM, 24bits, 48khz.**

For Acquisitions, Télé-Québec may accept other file formats. **In such cases, an agreement must be reached and a test file transmission conducted with Télé-Québec Technical Operations**; contact normestechniques@telequebec.tv.

Other file formats that may be acceptable:

- XDCAM HD422 50 Mbps encapsulated Quick Time;
- DNxHD 145 or 220 Mbps encapsulated MXF OP1a or QuickTime;
- ProRes 422 (Standard or HQ) encapsulated QuickTime;

  Audio format: PCM, 24 bit / 48 kHz sampling.

1.1   FILES NAMING CONVERTIONS

The file name must clearly identify the program title. It must contain the following information, at a minimum:

1. Program title
2. Season number (as necessary)
3. Episode number (as necessary)

   E.g.: Program_S01_E08.mxf

- The parts of the file name must be separated by an underscore ("_") symbol.
- The file name must not contain any accented or special characters, nor any spaces.

To ensure files are delivered to the correct recipients, please name files for online use with a suffix denoting the department to which they are destined:

- Social platforms (Facebook, YouTube, Instagram, Twitter, LinkedIn): _RS
- Web Exclusivity: _WEB
- Tele-Quebec en classe: _TQEC
- For promos, see the Standards on the Tele-Québec website:
  https://www.telequebec.tv/societe/logo-et-normes-techniques

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2. VIDEO

2.1 SIGNAL PARAMETERS

- Image format is 1920 x 1080;
- Sampling structure must be 4:2:2;
- Original frame rate and scan type;
- If a frame rate conversion must be done, the 2:3 conversion sequence must be applied (also called 3:2 pulldown)
- Interlaced scan shall be Upper field first, if applicable;
- The production must be shot on a digital HD camera.

2.2 VIDEO LEVELS

Video levels must conform to the following values:

- White maximum: 700 mV;
- Black minimum: 0 mV;
- Cb-Cr Chrominance: ± 350 mV.

2.3 USE OF SD IMAGES

2.3.1 SD 4:3 IMAGES

When use of SD 4:3 images is required, either of two display modes can be used: pillarbox or top-bottom crop. When reframing in pillarbox format, be sure to remove the entire closed-captioning signal from lines 21 and 284 of the SD frames before conversion.

When converting from SD to HD:

- No deterioration (geometrical distortion) of the original horizontal and/or vertical image proportions will be accepted.
- Take care to preserve the main elements of the original 4:3 image (e.g., action, graphics).

Pillarbox

The black areas (pillars) are shown within the 16:9 picture.

Top-bottom crop

The dotted areas show the parts of the original 4:3 image not shown on a 16:9 screen.

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2.3.2 SD 16:9 IMAGES

When use of SD 16:9 images is required, aspect ratio conversion must be such that the original SD 16:9 image is enlarged to fill the 16:9 HD frame. No deterioration (geometrical distortion) of the original horizontal and/or vertical image proportions will be accepted.

2.4 EMBEDDED SUBTITTLES

The embedded subtitles in any language other French shall be translated in French.

2.5 TIMECODE

The timecode must be present and continuous from the start of the program to the end, and drop frame compensated if the frame rate is 29.97i.

The timecode corresponding to the first frame of the program must be 10:00:00;00.

If the delivered file has a frame rate other than 29.97, it will be converted. The time code will be drop-frame compensated so that it is synchronized with real time. The total duration of the converted file must correspond to that set out in the contract and/or TV show model, if applicable. Particular attention must therefore be paid when a program is converted from 23.976 to 29.97 fps.

2.6 SAFE ACTION AND TEXT AREAS

All action must be framed within a central zone of height 93% x width 93% of the full frame.

All text must be framed within a central zone of height 90% x width 90% of the full frame.

2.7 RESERVED AREAS

2.7.1 TELE-QUEBEC LOGO

The network ID logo ("bug") is inserted by the Presentation department, for the full running time of the program, in the lower right corner of the frame. A further safe title space of 250 x 150 pixels from the lower right corner of the frame must be kept clear. Never use this space for subtitles, text presenting program participants, or other text.

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2.7.2 DESCRIPTIVE VIDEO LOGO (if applicable)

Where descriptive video is provided, this may be stated in one of two ways:

- Identification slate before the start of the program (added by Télé-Québec);
- A/V logo overlay at the start of the program in the upper left corner of the frame.

The descriptive video logo overlay is inserted by the Presentation department during the initial seconds of the program. A space of 300 x 250 pixels from the upper-left corner must be kept clear. Do not use this space for a title or graphic. The slate must be free of dialogue (music only) for a period of **5 seconds**. This information must be entered on the cue sheet (if applicable).

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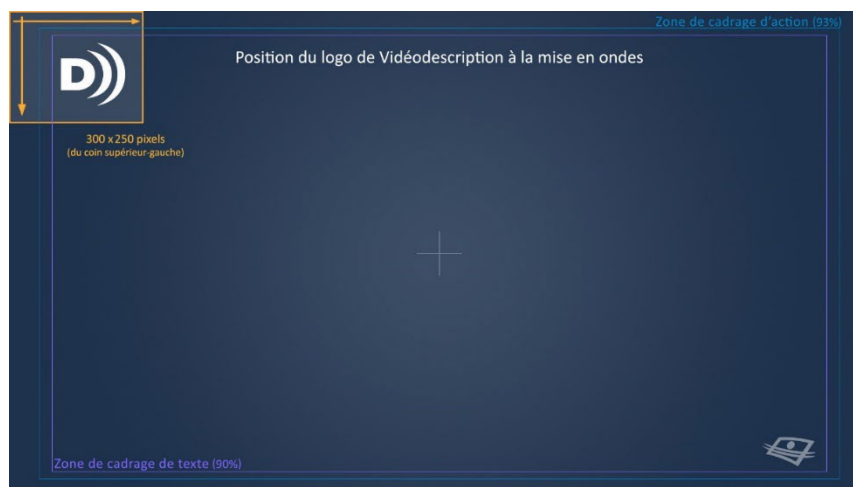
2.8 END CREDITS

A squeeze-type digital video effect (DVE) may be inserted by Tele-Quebec during the end credits. All program audio will be cut and the visual portion of the image "squeezed" into a window occupying only part of the screen. The promo presented during this time may last from 15 to 30 seconds.

Nothing related to program content must therefore be included within the end credits.

Credits type: Given the image reduction caused by the squeeze DVE, a 50%-shrink legibility test is recommended. Avoid all serif typefaces.

Regardless of the delivery format, vertically scrolling credits must be clear and legible in 29.97i. If they are not, the credits must be presented as separate pages.

3.   AUDIO

3.1 MAIN PROGRAM TRACK

The main program soundtrack must be distinct 5.1 multichannel. If this is not possible, an agreement must be reached ahead of time with Tele-Quebec to produce a soundtrack in stereo.

There must be a Dolby Surround or stereo version of the main program on tracks 7 and 8.

Audio tracks must be assigned as follows:

Track 1	Left channel (or failing this, stereo Lo)	Stereo music, ambient sound, SFX
Track 2	Right channel (or failing this, stereo Ro)	
Track 3	Center canal	Dialogue and voice
Track 4	LFE channel	Low frequency
Track 5	Rear left channel	Stereo music, ambient sound, SFX
Track 6	Rear right channel	
Track 7	Stereo channel Lo	5.1 stereo downmix
Track 8	Stereo channel Ro	
Track 9	Silence	-
Track 10	Silence	-
Track 11	Video description left channel	Video description stereo mix, uncompressed
Track 12	Video description right channel	

If the program is in stereo, it must be on tracks 1-2 and 7-8; tracks 3 to 6 must be free. Note that in all cases tracks 1 and 7 represent the left channel and tracks 2 and 8 represent the right channel.

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3.2 PROGRAM VIDEO DESCRIPTION TRACKS

The soundtrack of the descriptive video of the program must be in stereo, uncompressed and comply to the audio standards published in this document.

It can be delivered to us in either of two formats:

- A separate .wav audio file to supplement the existing video file in XDCAM 50 Mbps.
- Inserted in the extisting video file as audio tracks 11-12.

Please note that, in all cases track 11 represents the left channel and track 12 represents the right channel.

3.3 VOCAL IDENTIFICATION OF TRACKS (distinct 5.1 multichannel programs)

The distinct 5.1 multichannel program lead-in must contain a test tone reference and a vocal identification on each audio track. The total duration of all vocal identifications must be a maximum of 10 seconds, and they must precede the test tone reference. They must be clear, precise and made in sequence, so that the assignment of the tracks is easily identifiable.

3.4 REFERENCE LEVEL

Our reference level is **-20 dBFS**, which corresponds to a reference level of **+4 dBu**.

3.5 AUDIO LEVEL AND METADATA

The integrated loudness over the duration of the program, meanwhile, must be **-24 LKFS +/-2 Lu** (measured using the ITU-R BS.1770-4 algorithm).

The maximum true-peak level is -2 dB.

Dialogue intelligibility must be maintained throughout the program.

The entire audio program must have an acceptable dynamic range. It is strongly recommended to maintain a loudness range (LRA) within 14 Lu. Compression that is excessively high and reduces sound quality, as well as a program with too great a dynamic range, may affect listening comfort and will not be accepted.

We recommend a Short Term Dialogues level of -24 LKFS, within +/- 5 LU.

A TV audio mix is required as a priority so as to comply with our audio standards.

*Tracks 7 and 8, as well as the video description tracks 11 and 12 must correspond to the same standards mentioned above.

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4.   LEAD-IN AND LEAD-OUT (Not applicable to Web exclusives and Tele-Quebec en classe)

The audio and video lead-in is 30 seconds and serves to calibrate the equipment as well as identify the contents of the files. The lead-out portion should be a minimum of 10 seconds. Each file must contain a lead-in, a program and a lead-out without any breaks.

Timecode	Duration (seconds)	Video track	Audio tracks
09:59:30;00	15	Slate	Vocal identifications
09:59:45;00	5	Slate	Test tone reference 400Hz
09:59:50;00	10	Black	Silence
10:00:00;00	----	Program	Program
--------	10	Black	Silence
--------	----	Textless (if applicable)	Silence

The test tone reference and colour bar levels must be consistent with the audio and video levels of the recorded program that follows.

Schematic layout of the tape or file:
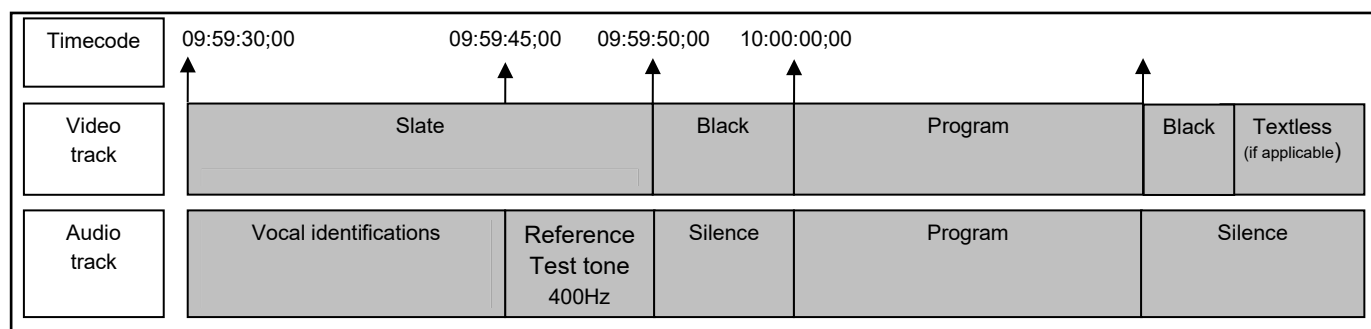
The slate must include the following information:

- French title (and original title, if applicable);
- Episode title and number;
- Audio identification (distinct 5.1 multichannel or, failing this, Dolby Surround or stereo);
- Program duration;
- Textless (if applicable).

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5.   CLOSED CAPTIONNING (CC)

All advertising material must be closed captioned for the hearing impaired and must conform to the specifications below:

- One file per program;

- Subtitling for the hearing impaired (STC) must be delivered in an individual file for each program. The type of file format accepted is **Scenarist (.SCC)**.

- The timecode must have the same frame rate as the delivered video file.

- If the video file and subtitles are delivered in 29.97 fps, the timecode must be in drop-frame, with a semicolon (;) I.e.: **10:00:00;00**

- The timecode shall start after the reference time, 10:00:00;00. If the timecode starts before 10 :00 :00 ;00 it will inhibits the expected Close captions delivery for the entire program duration.

6.   ADDITIONAL REQUIREMENTS FOR ORIGINAL PRODUCTIONS

In addition to the standards outlined in this document, the original productions must comply with the following specifications:

6.1   COMMERCIAL INSERTS

6.1.1   FOR PRE-PACKAGED PROGRAMS

Slots for insertion of commercials will be determined by insertion of 10 frames of black (accompanied by silent audio) during the program. **These 10 frames black inserts must be included in the calculation of the total program run time.**

6.1.2   FOR LIVE BROADCASTS

Recorded commercial inserts shall have the true run time of the commercial blocks broadcast as part of a live program.

For example, if the commercial block run time is 3 min 30 sec, the recorded commercial insert shall also have a run time of 3 min 30 sec, and so on for all commercial blocks. The run times of these commercial inserts is not included in the total program run time.

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6.2   COMMERCIAL BREAK BUMPER IN/OUT

Each **bumper** must have a duration of **4 seconds** and must enable insertion of one or more partner logos by the Presentation department. The bumper must include a clear space 250 pixels tall starting from the bottom of the screen for addition of any logos. Do not insert any title or graphic in this space. The bumper must not contain any dialogue (music only).

6.2.1   BANNER OVERLAY

A banner is a small visual overlay **without audio** displayed at the bottom of the screen for ± 10 sec during the program presentation. A 15-second window will be determined by production on a case-by-case basis.

Rule for closed captioning: display closed captions at the top of the screen during the designated 15 seconds (provide the info to the company producing the closed captions).

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7. ADDITIONAL REQUIREMENTS FOR ACQUISITIONS

In addition to the standards outlined in this document, the acquisitions must comply with the following specifications:

7.1 NEUTRAL BACKGROUNDS (TEXTLESS) AND OTHER ELEMENTS

Neutral backgrounds as well as any other elements deemed relevant must be provided (e.g.: typography). The textless file must be following the program.

7.2 SOUNDTRACKS FOR FEATURE FILMS

A TV audio mix is required to comply with our audio standards. If this mix is not available, delivery of the Stem files is requested.

8. ADDITIONAL REQUIREMENTS FOR WEB EXCLUSIVITY AND TELE-QUEBEC EN CLASSE

In addition to the standards outlined in this document, Web exclusives and Tele-Quebec en classe must comply with the following specifications:
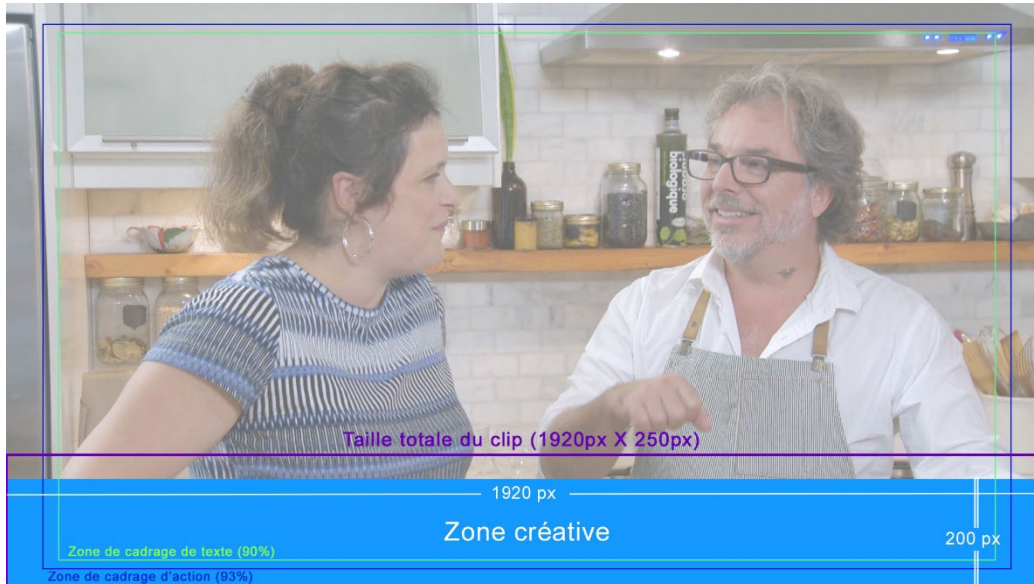
- 1 program per file;
- All programs must be delivered as 1920x1080 with its original frame rate and scan type.
- The timecode must be constant from beginning to end and for a 29.97fps use the « drop-frame » mode.
- **No lead-in and lead-out**, program only;
- The timecode corresponding to the first frame of the program must be 10:00:00;00.

9. SPONSOR BANNERS

FORMAT AND CODEC

- Banner size: 1920 x 200
- Total clip size: 1920 x 250
- **32-bit** QuickTime codec: Apple Animation, PNG or Apple ProRes4444.
- **QuickTime** video file (.mov), **10 seconds** at **29.97 fps** with alpha channel integrated.
- The clip's alpha type should be straight (**not premultiplied**)
- The first frame and the final frame must be completely empty: 100% transparent. The banner must include an IN and OUT transition.
- Always provide for a clearance at bottom and left of the **text information** contained within the banner, so as to comply with the SMPTE-HD **safe text area** (90%) standard. That clearance corresponds to a distance of 54 pixels from the bottom and 96 pixels from the left border of the clip.

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See example below:

Taille totale du clip (1920px X 250px)

1920 px

Zone créative

200 px

Zone de cadrage de texte (90%)

Zone de cadrage d'action (93%)

All productions must be approved by Tele-Quebec before broadcast.

10.   RIGHT OF REFUSAL

Any deviation from these specifications must be authorized by prior agreement with Tele-Quebec.

Tele-Quebec reserves the right to reject any program that does not comply with the technical specifications described in this document.

Consult our website at www.telequebec.tv to make sure you have the latest version of this standard.

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