

Technical Specifications

Program content (Original productions and Acquisitions)

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Change history log

April 2025

- Addition of safe zone references (section 3.2)
- Adjustment of requirements for dubbing cases (section 3.5)
- Added notes for subtitles file revealing modes (section 4.2)

July 2024

- Revision of the entire structure of the document to make it compliant with accessibility standards
- Clarification of the requirements of each profile
- Review of requirements for dubbing cards

October 2023

- Introducing multilanguage profiles
- Adjustments on video codec options
- Overall revision of the document format

April 2023

Details added in relation to the required materiel for dubbing purposes, section 3.5

July 2022

 Redirection of questions concerning technical issues or file transfer systems to the initial contact of the client at programming, who will redirect internally if necessary (sections 2 and 6)

May 2022

- Added change history and renumbered sections
- Addition of a note concerning the typography to be provided for acquisitions intended for dubbing (section 3.4)



1- Notice

Bell Media offers content to its customers across different services, such as traditional linear broadcasting, digital applications and subscription video-on-demand platforms. To meet the needs of these numerous systems and considering the variety of content, four (4) different technical specification profiles of the material to be delivered are detailed below.

The choice of delivery profile is based on certain criteria such as product type, delivery times, targeted brand(s) or platform(s), and other specific considerations. Please refer to your contact at Bell Media who will be able to tell you which profile to select for your production or delivery of your files.

Any exceptions to the specifications below must be agreed to by a Bell Media technical representative prior to delivery. If you have any questions regarding these profiles, your Bell Media contact will refer you to the correct technical contact person, depending on the situation.

2- Description and details of technical profiles

2.1 Profile names

Profiles for Multilingual content

Multilingual WITHOUT EMBEDDED SUBTITLES Multilingual WITH EMBEDDED SUBTITLES

In these profiles, the main video file is delivered in the original language, and any additional dubbed audio or accessibility files are delivered separately. These should be synchronized with the main video file.

Note that a multilingual profile does not necessarily mean that a dubbed audio language is provided, but rather that two languages are provided for in the contract, and therefore that the second language could be offered only in subtitles, which modifies the deliverable accessibility text files (details below).

Example of multilingual deliverables (suggested nomenclature)

- VIDEO (main file)
 - o TITLE S1 E01 TXTLS HD2398p enUS SUR DV.mov (or .mxf)
- AUDIO (dubbing)
 - TITLE_S1_E01_frFR_ SUR_DV.wav (or .mov)
- ACCESSIBILITY
 - o TITLE_S1_E01_ frFR _CloseCaptionning.scc
 - o TITLE S1 E01 frFR ForcedNarrativesSubtitles.itt (or .stl / .ttml)
 - o TITLE_S1_E01_ frFR _FullSubtitles.scc
- DUBBING CARD(S)
 - TITLE S1 E01 frFR DubbingCard.png (or.mov)

Profiles for content delivered in a single language

Unilingual NATIVE FRAME RATE Unilingual BROADCAST READY

In these profiles, the delivered file contains all the required elements in the language provided for in the contract.

Example of a unilingual file (suggested nomenclature)

VIDEO, AUDIO AND ACCESSIBILITY

• TITLE_S1_E01_HD2398p_frFR_SUR_DV.mov (or mxf)



Profile: Multilingual WITHOUT EMBEDDED SUBTITLES

- This profile is the preferred one if at least two languages are provided for in the contract.
- TYPICAL USE: Acquisitions or original multilingual productions in which THE DIALOGUES ARE NOT TRANSLATED ON SCREEN (without embedded subtitles). The main video file is delivered in the original production language and displays the main title, credits, locations and speaker identification and any other original graphics. Subtitle files are delivered separately.
- Video (see details of technical specifications in section 3.1)
- Audio (see details of technical specifications in section 3.2)
 - The original language audio is embedded in the main video file, and the dub audio is delivered as a separate file if required.
 - O Dubbing:
 - Translation of visual elements and dialogue should be included in accessibility text files, not on screen.
 - The dubbing cards must be delivered separately, either in image file (JPEG, PNG), or in video format (MOV) with a duration of 3 seconds per card. These cards must be provided for each dubbed language provided for in the contract.
 - o Video description: (see details in section 3.5)
- Required accessibility text files (see further details in section 4)
 - o The required deliverables differ depending on whether audio dubbing is provided or not:

		MULTILING	UAL RIGHTS			
		WITHOUT EMBEDDED SUBTITLES				
		DUBBED CONTENT	UNDUBBED CONTENT			
	Typical product	Acquisition or original dubbed production	Acquisition or original production subtitled in the second language(s)			
		1 -A	1-B			
VIDE	0	Textless visuals (Without embedded subtitles)	Textless visuals (Without embedded subtitles)			
AUDI	0	Multilingual audio	Original audio only			
Closed captioning						
for the hearing	ORIGINAL LANGUAGE	Dialogues and soundscapes	Dialogues and soundscapes			
impaired						
CC	SECOND LANGUAGE	Dialogues and soundscapes	Soundscapes only			
Forced Narrative	ORIGINAL LANGUAGE	Subtitles translating undubbed dialogue	Subtitles translating undubbed dialogue			
Subtitles	SECOND LANGUAGE	Subtitles translating undubbed dialogue and any text seen on screen translated for ease of understanding. These should not	Subtitles translating all dialogue and any text seen on screen translated for ease of understanding. These should not include generics			
Full subtitles	ORIGINAL LANGUAGE	Dialogues and soundscapes + Subtitles translating undubbed dialogues, as well as texts on screen (except credits)	Dialogues and soundscapes + Subtitles translating undubbed dialogues, as well as texts on screen (except credits)			
FN+CC	SECOND LANGUAGE	Dialogues and soundscapes + Subtitles translating undubbed dialogues as well as texts on screen (except credits)	Dialogues and soundscapes + Subtitles translating all undubbed dialogue, as well as texts on screen (except credits)			

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Profile: Multilingual WITH EMBEDDED SUBTITLES

- Profile to be used only when the main UNSUBTITLED video (without embedded text) is not available
- TYPICAL USE: Multilingual acquisitions or original productions in which foreign dialogues are translated directly on screen (texts or subtitles embedded in the image) in the original production language.
- Video (see details of technical specifications in section 3.1)
- Audio (see details of technical specifications in section 3.2)
 - The original language audio is embedded in the main video file, and the dub audio is delivered as a separate file if required.
 - Dubbing:
 - Translation of visual elements and dialogue should be included in accessibility text files, not on screen.
 - The dubbing cards must be delivered separately, either in image file (JPEG, PNG), or in video format (MOV)
 with a duration of 3 seconds per card. These cards must be provided for each dubbed language provided for
 in the contract.
 - o Video description: (see details in section 3.5)
- Required accessibility text files (see further details in section 4)
 - o The required deliverables differ depending on whether audio dubbing is provided or not:

		MULTILINGUAL RIGHTS				
		WITH EMBED	DED SUBTITLES			
		DUBBED CONTENT	UNDUBBED CONTENT			
Typical product		Acquisition or original dubbed production	Acquisition or original production subtitled in the second language(s)			
		2-A	2-B			
VIDE	0	Subtitles embedded in the image (dialogues in a foreign language or inaudible)	Subtitles embedded in the image (dialogues in a foreign language or inaudible)			
AUDI	0	Multilingual audio	Original audio only			
Closed						
captioning for the	ORIGINAL LANGUAGE	Dialogues and soundscapes	Dialogues and soundscapes			
hearing impaired						
CC	SECOND LANGUAGE	Dialogues and soundscapes	Soundscapes only			
	ORIGINAL LANGUAGE	NOT REQUIRED - already translated	NOT REQUIRED - already translated			
Forced Narrative Subtitles	SECOND LANGUAGE	Subtitles translating undubbed dialogue and any text seen on screen translated for ease of understanding. These must not include credits. *Take vertical positioning into account to avoid overprinting with inlaid elements	Subtitles translating all dialogue and any text seen on screen translated for ease of understanding. These should not include credits. *Take vertical positioning into account to avoid overprinting with inlaid elements			
	ORIGINAL LANGUAGE	NOT REQUIRED - already translated	NOT REQUIRED - already translated			
Full subtitles	SECOND LANGUAGE	"Dialogues and soundscapes + Subtitles translating undubbed dialogues as well as texts on screen (except credits) *Take vertical positioning into account to avoid overprinting with	"Dialogues and soundscapes + Subtitles translating all the dialogue as well as texts on the screen (except the credits) *Take vertical positioning into account to avoid overprinting with			
FN+CC	SECOND LANGUAGE	*Take vertical position	_			



Profile: Unilingual NATIVE FRAME RATE

• TYPICAL USE:

- Acquisitions or original unilingual productions, with audio and video elements in the original language or translated on screen and audio, which require a higher quality source for Bell Media's digital platforms
- o Programs for which the "subtitled" experience is not acceptable on a specific broadcast brand, or for which dubbing is not provided for in the contract.
- Could be required in addition to one of the previous profiles (to be confirmed with your programming contact)
- Video (see details of technical specifications in section 3.1)
- Audio (see details of technical specifications in section 3.2)
 - Only the original or dubbed audio is required, depending on what is provided in the contract, and delivered integrated directly into the main file.
 - Dubbing:
 - The translation of visual elements or dialogues into a foreign language must be included within the visual
 of the main file.
 - Dubbing cards must be included at the end of the program on the main file, with an average duration of 3 seconds per card.
 - Video description: (see details in section 3.5)
- Required accessibility text files (see further details in section 4)

		UNILINGUAL RIGHTS
		NATIVE FRAME RATE
Typical product		Original acquisition or production, Single language, 4K or HD, 23.976
		3
VIDE	:0	Subtitles embedded in the image (dialogues in a foreign language or inaudible)
AUD	10	Unilingual audio, according to the contract
Closed captioning for the	ORIGINAL LANGUAGE	Dialogues and soundscapes in the language provided
hearing impaired		
CC	SECOND LANGUAGE	
Forced Narrative Subtitles	ORIGINAL LANGUAGE	
FN	SECOND LANGUAGE	NOT REQUIRED
Full subtitles	ORIGINAL LANGUAGE	
FN+CC	SECOND LANGUAGE	

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Profile: Unilingual BROADCAST READY

- TYPICAL USE:
 - Original unilingual acquisitions or productions, with audio and video elements in the original language or translated on screen and audio and required for last-minute deliveries including traditional linear broadcasting.
 - o Programs for which the "with narrative subtitles" experience is not acceptable on a specific broadcast brand, or for which dubbing is not provided for in the contract.
- Could be required in addition to one of the previous profiles (to be confirmed with your programming contact)
- Video (see details of technical specifications in section 3.1)
- Audio (see details of technical specifications in section 3.2)
 - Only the original or dubbed audio is required, depending on what is provided in the contract, and delivered integrated directly into the main file.
 - Dubbing:
 - The translation of visual elements or dialogues into a foreign language must be included within the visual of the main file.
 - Dubbing cards must be included at the end of the program on the main file, with an average duration of 3 seconds per card.
 - o Video description: (see details in section 3.5)
- Required accessibility text files (see further details in section 4)

		UNILINGUAL RIGHTS
		BROADCAST READY
	Typical product	Acquisition or original production. Single language, HD, 29.97
		4
VIDE	EO	Subtitles embedded in the image (dialogues in a foreign language or inaudible)
AUD	10	Unilingual audio, according to the contract
Closed captioning for the hearing impaired	ORIGINAL LANGUAGE	Dialogues and soundscapes in the language provided
CC	SECOND LANGUAGE	
Forced Narrative	ORIGINAL LANGUAGE	
FN	SECOND LANGUAGE	NOT REQUIRED
Full subtitles	ORIGINAL LANGUAGE	
FN+CC	SECOND LANGUAGE	

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3- Audio/Video Specifications

3.1 Video specifications

No video sources need to be upscaled (native image format is required); 4K video must come from a 4K source just like HD video must come from an HD source

For the following profiles: Multilingual WITHOUT EMBEDDED SUBTITLES, Multilingual WITH EMBEDDED SUBTITLES and Unilingual NATIVE FRAME RATE

For these profiles we prefer to receive the material in the native filming format, to avoid any loss of quality. So please choose the specifications below based on the source and/or what is requested in the contract.

UHD HDR (Based on Dolby Vision specifications)

Container: .MOV

CODECS: ProRes 4444 or ProRes 4444XQ Color Coding: (Based on chosen codec norms)

Resolution: 3840x2160, Image ratio: 16x9, Pixel aspect ratio: 1:1

Frame rate: As on source / Native (23.976p preferred)

Colorimetry: BT.2020

* Preference for Dolby Vision metadata file as separate file

UHD SDR

Container: .MOV or .MXF

CODECS: ProRes HQ (or better), DNxHR HQ (or better), in order or preference

Color Coding: (Based on chosen codec norms)

Resolution: 3840x2160, Image ratio: 16x9, Pixel aspect ratio: 1:1

Frame rate: As on source / Native (23.976p preferred)

Colorimetry: BT.709

HD SDR

Container: .MOV or .MXF

CODECS: ProRes HQ (or better), DNxHD 175x, XDCAM 50, in order or preference

Color Coding: (Based on chosen codec norms)

Resolution: 1920x1080, Image ratio: 16x9, Pixel aspect ratio: 1:1

Frame rate: As on source / Native (23.976p preferred, 29.97i as second choice)

Colorimetry: BT.709

For the following profile: Unilingual BROADCAST READY

Only one format is accepted for this profile, considering the use of the latter.

HD SDR

Container: MXF CODEC: XDCAM HD Bitrate: 50 mbits/sec Resolution: 1920x1080

Color Coding: YCbCr / 4:2:2, Image Ratio: 16x9, Pixel aspect ratio: 1:1

Frame Rate: 29,97 fps

Image Structure: Interlaced (upper field first)

Colorimetry: BT.709

*In all cases (all profiles), the timecode track should start at 00:00:00:00

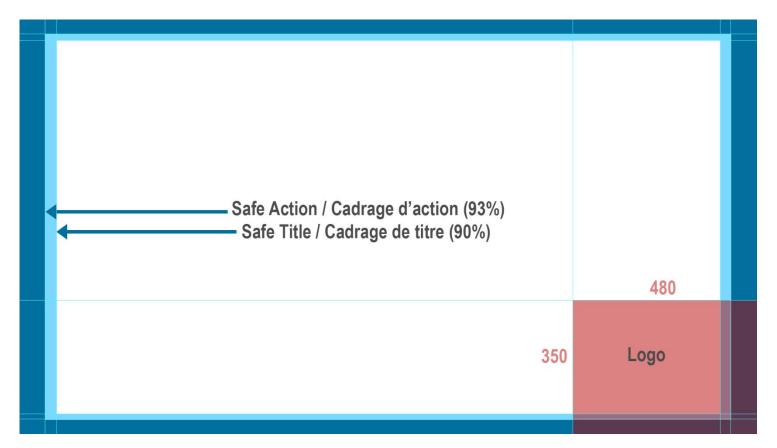


3.2 Safe zone references

All visual elements must respect the safe zones below, in accordance with the SMPTE ST 2046 standard for the 16:9 aspect ratio.

- The main action must be framed within the central area of 93% of the width and height of the HD image.
- Graphic elements must be framed within the central area of 90% of the width and height of the HD image.

Additionally, Bell Media recommends clearing the lower right space to 350 pixels high by 480 pixels wide, to accommodate the presence of channel logos embedded during broadcasting.





3.3 Audio specifications

For all profiles:

Sampling frequency: 48Khz

BitRate: 24bit

Loudness: -24 LKFS +/- 2 LU (Based on ITU-R BS.1770-4)

Maximal Peak: -2 dBFS Audio tracks layout:

SURROUND

TRACK	1	2	3	4	5	6	7	8	9	10	
ASSIGNMENT	LEFT	RIGHT	CENTRE	CENTRE	155	SURROUND	SURROUND	Stereo/	Stereo/	Stereo	Stereo
ASSIGNIVIENT	LEFI	KIGHT	CENTRE	LFE	LEFT	RIGHT	DV LEFT	DV RIGHT	LEFT	RIGHT	

STEREO

TRACK	1	2	3	4	5	6	7	8	9	10
ASSIGNMENT	Stereo	Stereo					Stereo/	Stereo/	Stereo	Stereo
ASSIGNIVIENT	LEFT	RIGHT					DV LEFT	DV RIGHT	LEFT	RIGHT

For the following profiles: Multilingual WITH EMBEDDED SUBTITLES and Multilingual WITHOUT EMBEDDED SUBTITLES

- The original primary language audio must be multiplexed (embedded) with the primary video file, as linear PCM tracks.
- Separate WAV or MOV files are required for each second language (dubbing), and their nomenclature must specify the language and audio format. The files must be synchronized with the main file.
- If video description is not provided, a stereo mix must be provided on tracks 7/8.

For the following profiles: Unilingual NATIVE FRAME RATE and Unilingual BROADCAST READY

- The audio must be multiplexed (embedded) into the main video file. No separate file options.
- If video description is not provided, a stereo mix must be provided on tracks 7/8.

3.4 Calculation of content duration based on frame rate

Be advised that Bell Media broadcasts its TV signal in 29.97 images/sec. "drop frame", therefore if a fixed duration has been
provided for in the contract with the scheduling for delivery (for example 45min 30sec), any product delivered at another
frame rate (ex. 23.976) must have a duration which will correspond to the real time during of the conversion, and not just
consider the end timecode of the source. For example:

Frame Rate	23,976 frames/sec	29,97 frames/sec
Length (Ex#1)	00:21:58:18	00:22:00;02
Length (Ex#2)	00:45:27:06	00:45:30;00



3.5 Material delivered for dubbing purposes

For source material intended for dubbing or promotional purposes:

- Audio components
 - Please include as many original, separate stereo tracks (stems) as possible, so that the dubbing is of better quality.
 This must include:
 - Full Mix
 - Separate Ambiences, Effects and Music (or M&E)
 - Isolated dialogues, without narration
 - o Failing to receive these elements, a Mix minus (without narration) will be accepted.
- Text Components
 - Please include separately any available closed captioning or forced narrative subtitle files in the original language,
 synchronized with the provided source file, in the specifications in Section 4.1
- In the case of a product with rights in dubbed only:
 - o Ideally two files should be delivered: a copy in the original language with all the texts on the screen, and a "textless" copy without any graphic elements or text embedded on the screen.
 - Please also include, if possible, the list of typographies used for the titles and subtitles of the original content, so that
 the dubbing services can translate them, while respecting as faithfully as possible the artistic choices made on the
 document in question. original language. This list can be communicated by email to your programming contact, or
 preferably, be included in a text file (.docx or txt) attached when delivering the main content.

3.6 Video description

When video description is provided for in the contract, the file received must contain the complete stereo mix, i.e. the descriptive dialogue mixed in the left and right channels (i.e. not just the narration) and synchronized with the main video file.

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4- Accessibility text files

4.1 Definition of accessibility text files



Closed Captioning for hard of hearing

Text synchronized with time code including both spoken dialogue and soundscapes for deaf and/or hard of hearing people. Refers to regular "close captions" used in traditional linear broadcasting.

- For multilingual profiles: delivered in "SCC" format (preferred) or STL or TTML1 as second choice.
- For **unilingual profiles**: obligatory integrated on the metadata tracks (608/708), and not delivered separately.



Forced Narrative Subtitles:

Overlay of text synchronized with time code which translates graphics (including the title of the film or series), texts and dialogues in undubbed foreign languages and which must be translated for the viewer. Narrative subtitles are "forced" because the viewer will not have to activate them; they will be displayed automatically when choosing a second language. This file is used as an additional file on digital platforms and can be integrated into the visual for broadcast on linear channels.

• Required in ITT, STL or TTML format.



Full Subtitles

Text synchronized with time code that includes both forced narrative subtitles and closed captioning for the hearing impaired. On Bell Media's digital platform (Crave), forced narrative subtitles are only displayed if captions are disabled in the user's playback settings. When the user enables closed captioning, the forced narrative caption is not displayed and for this reason we require that all elements of the forced narrative story be included with the closed captioning in each full subtitles file. This file is only used on digital platforms, and not for broadcast on linear channels.

• Required in "SCC" format (preferred) or STL or TTML1 as second choice.

4.2 Revealing modes

Unless otherwise specified, closed captioning and full subtitles should be delivered with the following revealing modes, depending on the content type:

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Fiction and documentaries: POP-ON

Reality TV, magazines, news, sports: ROLL-UP (3 lines)



4.2 Global Notes

- Closed captioning and subtitles must always be positioned vertically in the image so as not to overlap with text or creative graphics already embedded on the screen, if applicable.
- Subtitles and other on-screen information must be located within the secure title area in accordance with SMPTE ST2046-2:2009.
- Please note that for live broadcasting, the station identification logo is embedded throughout the program in the lower right corner. The use of graphics, subtitles and other text elements should be avoided in this area.
- Also avoid overlays of any logo or graphics during the first 10 seconds following a return from a pause; This is often necessary to insert string identification elements.

5- Content delivery

5.1 Notes

All delivered items must have readable file names and follow the naming convention described in the examples in Section 2.

Common language values below are suggested (for any other language, please use something representative)

CODE	Description
frCA	French (Canada)
frFR	French (France)
enUS	English (North America)
enGB	English (Great Britain)

5.2 Files delivery

There are different methods for submitting a file electronically to Bell Media. To request access to our file exchange services, contact your programming contact who will be able to redirect you to the right internal team.

Before a file delivery can take place, agreements must be established between Bell Media and the partner. For new users, a test file is required to ensure the product can be ingested and processed correctly by our transcoding and delivery systems.

For advertisements, we have interfaces with major sales distribution services, and a separate technical specifications document. Please contact service providers directly to provide commercial materials, and your Bell Media routing contact for details.

