User Guide

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Web SL Editor User Guide

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Abstract:

This document is meant to be a concise user guide for professional users who wish to use ImAc Sign language Production Tools.

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0.1	19.03.2018	Kimiasadat Mirehbar	ANGLA	Revised and updated user guide – first iteration

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EXECUTIVE SUMMARY

This document is meant to be a concise user guide for professional users who wish to use ImAc Sign language Production Tools.

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Acronym	Description
ACM	Accessibility Content Manager
AD	Audio Description
AST	Audio Subtitles
ST	Subtitling
ED	Editor Access
SL	Sign Language

1. WEB SL EDITOR USER GUIDE

This document aims to be a user guide for professional users who wish to use the ImAc Web SL Editor for the first time.

First the functionality of the tool is discussed then we explain a scenario in which a professional user wants to edit an SL file from scratch for a 360°/VR video which sign language task has been assigned to them previously from the CM (Content Management Interface of the Accessibility Content Manager).

All assigned sign language tasks to a professional user is visible inside the "Editing Interface".

1.1. WEB SL EDITOR FUNCTIONALITIES

1. Login

User accesses the Editing Interface via the web browser (illustration 1) and enters username and password previously provided by administrator.
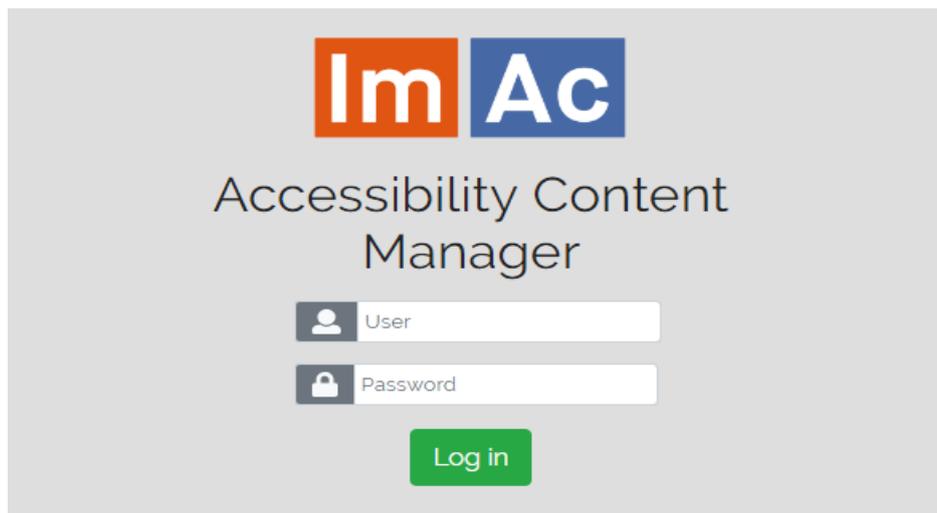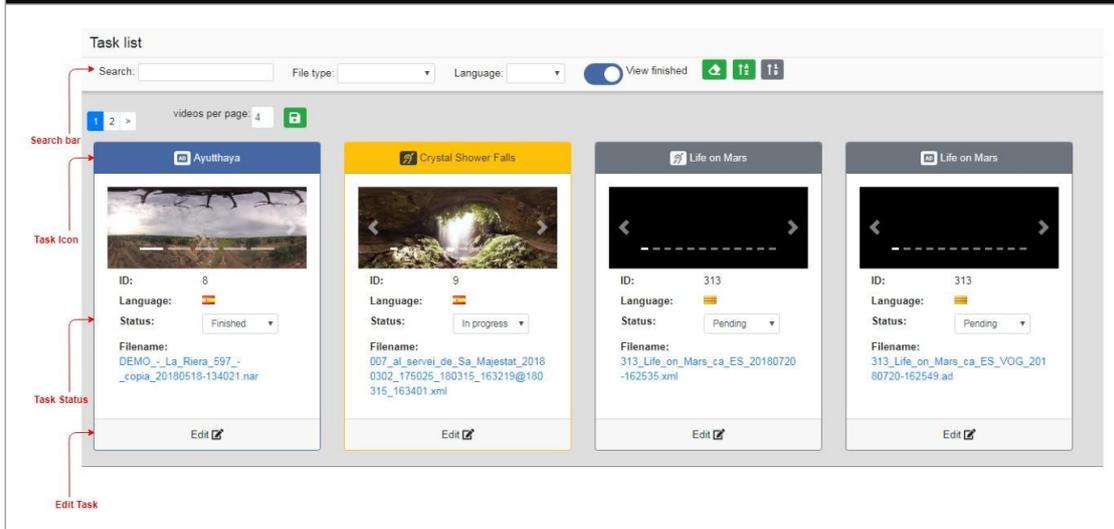

Illustration 1: ACM login page

2. Navigation on main page

When entered, a window with the list of assigned tasks (sign language tasks for the purpose of this document) to the user with their corresponding videos appears (Table 1). From here the user can make use of the following tools:

Search bar	With this tool, user can search through their assigned tasks and view them alphabetically, based on being finished or not, etc.
Task icon	The icon shows the type of task we are dealing with: it can be either a subtitling, a sign language or an audio description task. For the purpose of this document we will only focus on the sign language tasks. The color of the row shows the status of the task.
Task status	The user can change the status of each task to: pending, in progress or finished.
Edit icon	By clicking on this button, the user is redirected to the Web SL Editor.

Table 1: Navigation elements on the Editing interface

User selects the sign language task and presses the "Edit" button and the Web SL Editor will appear.

3. SL Editor UI

Next, the user sees below column on the left of the Web SL Editor. It includes five subsections:
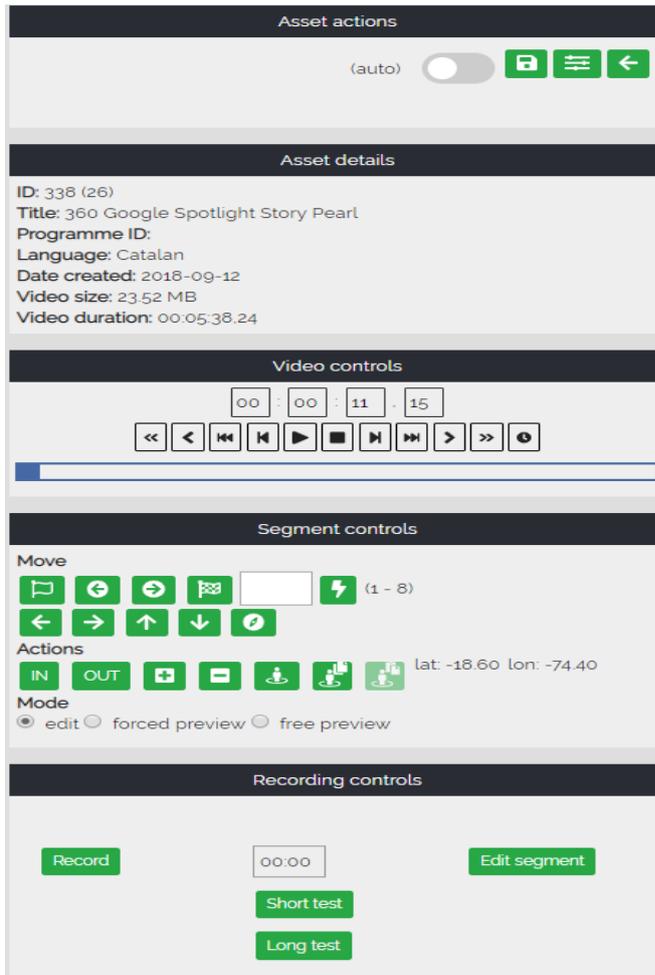
Asset actions – see table 2

Asset details – basic characteristics of asset

Video controls – see table 3

Segment controls – see tables 4 to 7

Recording controls – see table 8 to 9

Asset actions	
(auto)	When the button named "(auto)" is switched on, auto save is enabled. The SL editor will periodically save the work of the user.
	Manually save SL files.
	Go back to the main page of the editing interface.
	This is a setting for the user to choose some configurations (see illustration 2).

Table 2: Asset actions

Illustration 2: Application settings

Video controls	
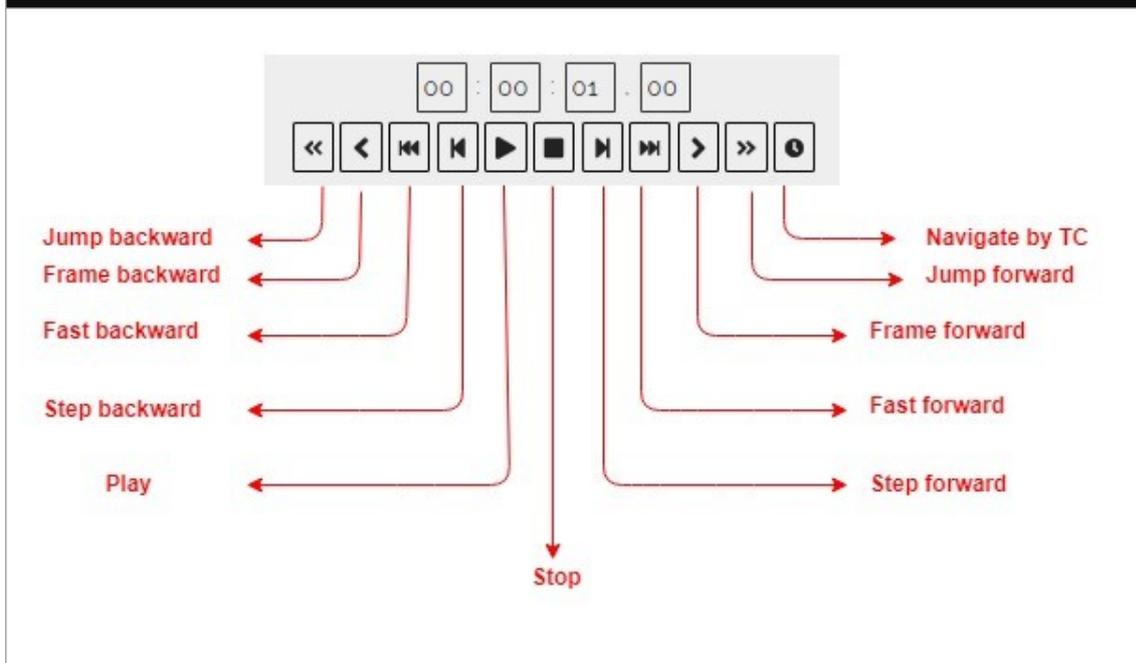
Frame backward	This button makes the video go backwards frame by frame (Alt+left).
Fast backward	This button makes the video go backwards with a fast speed (Alt+F8).
Step backward	This button makes video go backwards with a slow speed(Alt+F7).
Play	This button plays and pauses the video (Alt+F2).
Stop	This button stops the video (going to the beginning) (Alt+F3).
Step forward	This button makes the video go forward with a slow speed (Alt+F6).
Fast forward	This button makes the video go forward with a fast speed (Alt+F5).
Frame forward	This button makes the video go forward frame by frame (Alt+right).
Navigate by TC	With this button, you can go to a specific time code in the video that you can indicate manually (Ctrl+Alt+T).
Jump backward	This button helps the user to jump some frames backward. The number of the frames to be jumped is configurable, see illustration 2 (Shift+Alt+Left).
Jump forward	This button helps the user to jump some frames forward. The number of the frames to be jumped is configurable, see illustration 2 (Shift+Alt+Right).

Table 3: Video controls

SL controls: section "Move"	

First segment	This button takes you to the first sign language segment.
Previous segment	This button takes you to the previous sign language segment in relation to your current position (Page down).
Next segment	This button takes you to the next sign language segment in relation to your current position (Page up).
Last segment	This button takes you to the last sign language segment.
Jump to segment	This button takes you to a specific sign language segment by entering its number.
Move Field of View to the left	With this button you move to the left in the spherical video (Ctrl+Alt+left).
Move Field of View to the right	With this button you move to the right in the spherical video (Ctrl+Alt+left).
Move Field of View up	With this button you move to the upper side in the spherical video (Ctrl+Alt+up).
Move Field of View down	With this button you move down in the spherical video (Ctrl+Alt+down).
Navigate by angle	With this button you can directly move the Field Of View to a specific angle of the video, instead of moving through the video manually with the previous options (Ctrl+Alt+A).

Table 4: SL controls: Move section

SL controls: section "Actions"	

Get TC In	This button sets the In Time Code for the sign language segment (the moment of the video in which the sign language segment is going to play—Shift+Page up).
Get TC Out	This button sets the Out Time Code for the sign language segment (the moment of the video in which the sign language should be finished—Shift+Page down). It is used as a window reference for the recording of the corresponding audio.
Insert segment	This button is useful for when you want to insert a new sign language segment between existing ones (Ctrl+Insert).
Remove segment	As the name suggests, this button removes the selected sign language segment (Ctrl+Delete).
Set current angle	This button sets an angle for current sign language segment. It is important for the user to know what the current angle means exactly. The current angle has great importance because we are working in 360° environment and sometimes the viewer needs to know where the exact angle of the speaker is in order not to get lost. The professional user has the possibility to tie a segment to a special angle for some types of SL where speaker location is required. Also, at the bottom left of the video, there is an arrow showing the direction of the current speaker (for edition purposes only). This angle is specified by latitude and longitude (Ctrl+A).
Copy current subtitle angle	This button copies the angle of the current segment to the clipboard (Ctrl+Shift+A).
Paste angle	This button pastes the angle on the clipboard to the current angle (Ctrl+Shift+V).

Table 5: SL controls: section "Actions"

Segment controls: Find / Replace	
Find/Replace	The subsection helps the user find specific words and replace them if needed.

Table 6: Segment controls: Find / Replace

Segment controls: section "Mode"	
Mode ◉ edit ○ forced preview ○ free preview	
Edit	This mode is used during the sign language editing process. The user can move freely via the segments and edit them as they wish with the tools described in previous parts.
Forced Preview	This mode is used for verification. This verification mode makes it easier for the signer as the video will change angle when needed during the playback of the video. Segments and angle are bound with the video. You cannot freely change angle at your wish, as the video itself takes you to the speaker's angle.
Free preview	This mode is used for verification. This verification mode is more real for the signer as if playing back the video with segments using HMD. Segments are bound to the video time code, but angle is not. It means that you can move angle (it is not fixed to the speaker) during the playback of the video.

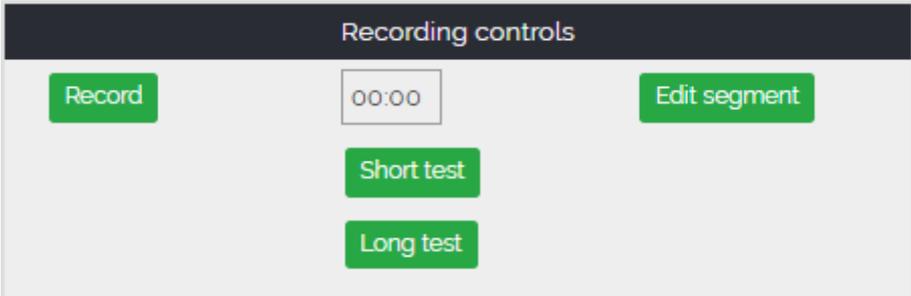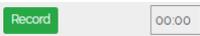Table 7: Segment controls: section "Mode"

Recording controls	
	First, the user is able to record the video for the corresponding sign language segment by pressing the "Record" button. Also a timer has been provided to check and compare the segment and SL video durations and to track the unwanted differences.
	Short test: it performs a test 2 seconds before the TC In of the sign language segment. Long test: it performs a test 5 seconds before the TC Out of the sign language segment.
	This button takes the user to a new window in order to edit the current segment. The details of such window is presented in table 9.
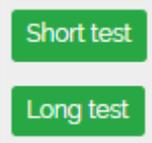
Table 8: Recording controls

Edit segment window

Edit Sign Language segment

Segment ID: 8
Segment duration: 8.24
Video duration: 8.264

③

④

Edit action
○ split ○ cut

Split this segment

1.81

0   1   2   3   4   5   6   7   8

Add Segment   Remove Segment

Save   Cancel

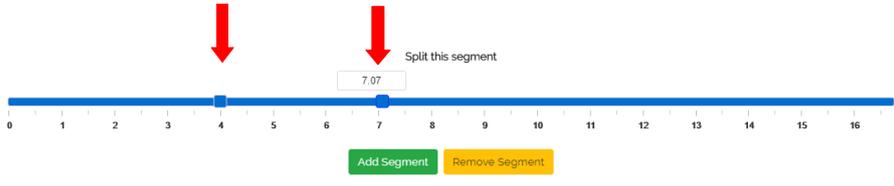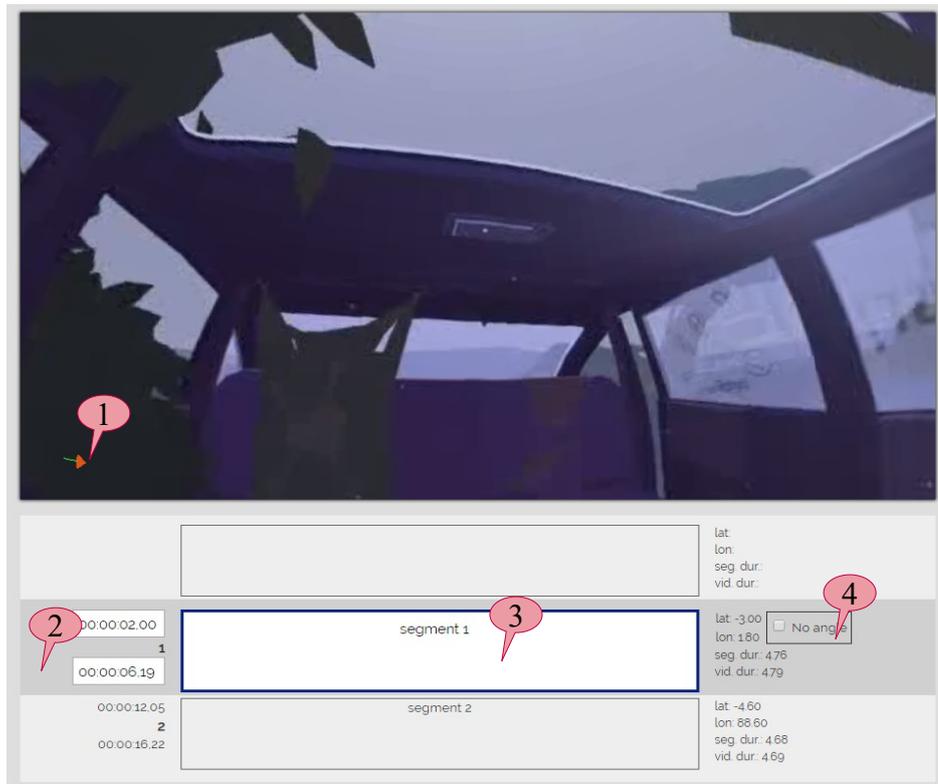| 1	This is the general specifications of the selected segment.
2	The video at the left, is the one which we want to put sign language for. The video on the right, is the video segment we have recorded previously for the sign language and it is being edited now.
3	Play/pause the video and its corresponding synchronized segment.

Edit segment window	
4	Edit action corresponds to the type of the edition you want to apply to your segment: Split: it splits the segment into different ones, when you press "Add segment" and then you can edit or remove these divided segments. The blue line is the time slot of the segment and its start and end point depend on the TC in and TC out of the segment which has been specified earlier. Red arrows show two time slots in which the segment is divided into them. You can add as many as segments you want. The time slot would look like this after dividing the segment into two different ones: Cut: in this mode the "Add segment" and "Remove segment" buttons disappear and it is used when you want a shorter version of the video segment. Selection means the time slot which we choose for our shorter version of the segment and it can be chosen from the beginning or the end of the segment or both. In the image below, the duration of the shortened segment will be the blue line only and the white line will be omitted from the segment.
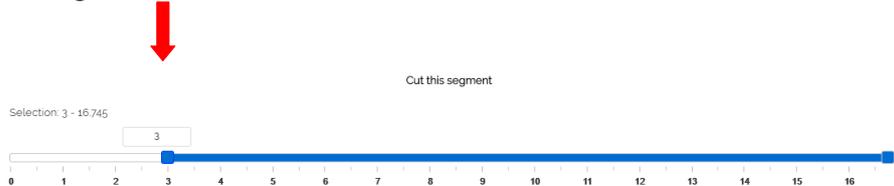
Table 9: Edit segment window

4. Preview window

 In the centre section, the user can edit the sign language script and preview the video along the sign language.

Preview window elements

	On the top the main video itself is previewed while being worked on.
1	At the left bottom of the video, a small red arrow is shown. This arrow shows the current angle view of the viewer.
2	The TC In and TC Out for the corresponding sign language segment and also the assigned number are displayed.
3	In this area, comments on the segment is written.
4	Right of the text editing area, four parameters are displayed: "lat" and "lon" correspond to the latitude and longitude of the selected segment angle. "seg. dur" is the current sign language current segment TC in and TC out time difference which is put manually by the signer before recording the sign language video. "vid. dur" is the actual duration of the sign language video that is going to be recorded by the signer after putting the TC in and TC out. Moreover, these is an option "No angle", which would eliminate any angle dimension of the current segment.

Table 10: Preview window

5. Segment list

Illustration 3: Segment list

On the right side of the SL editor the user sees a list of the segments.

6. Save SL file

When user finishes the work, they can save it with a button located in the left menu and then go back to the Editing Interface by pressing the ED button on the top right.

7.Video angle

Due to the nature of immersive environment and the importance of the view angle, a separate subsection on the matter is presented. It is noteworthy that you need to read previous sections fully to understand this section.

By default, and at first, the video has the current angle as longitude: 0.00° and latitude: 0.00°. While editing/creating an SL, an audio describer has two possible methods of interacting with angles:

1. **Angle navigation**: as the name suggests, the user can navigate through different angles of a video (this doesn't imply that the segment is bound to the angle). In this editor, there are two ways to do that:
    a. The user can navigate by angle by holding the mouse left button on the **preview window** and moving it until finding the right video angle.
    b. The user can go to section "Move" of the setting, find the button **"Navigate by angle"** or use the shortcut Ctrl+Alt+A**.** Then a window opens that lets the user to choose a latitude and longitude of the angle. By entering these numbers, the user is headed directly to that angle of the video.

    Both can be done with the video being paused or played.

Table 10 describes some elements to take into account during the navigation by angle.

Angle related elements when navigating by angle

1	This longitude and latitude correspond to the current angle in which the describer views the video and it changes when the above actions are done.
2	The small red arrow points to the angles assigned to the segment so it keeps changing when the above actions are done.

Table 11: Elements to take into account during angle navigation

2. **Segment angle:** angle navigation is only for speaker finding or similar location findings in the 360° sphere. But it is important to know how to bind an angle to a segment. This is done solely by finding the desired angle by navigating and finally going to "Actions" section and clicking on "**Set current angle**" or using the shortcut Ctrl+A. The main difference here is that this time the current angle is bound to the segment.

1.2. Scenario of an SL segment creation

Imagine a professional user wants to produce a sign language for a specific 360º/VR video which has been assigned to them in advance. In the Web SL Editor of ImAc it is possible to do this in an efficient manner.

Before starting to edit, the user has to access the Edition Interface and select the desired sign language task, then the Web SL Editor appears and the procedure is as below:

1. First step is to create the script that the user will record, as if it was a subtitling, but signing the different scenes of the video.
2. In each segment, the user will have to type the text, and set the TC IN (Shift+Page Down) and TC OUT (Shift+Page Up), while playing/pausing the video (Alt+F2), or frame by frame as well (Alt+left/right).
3. As we are working in 360° we need an angle for each segment, the user can search for

desired angle (Ctrl+Alt+arrows) or by moving the mouse over the video and set it (Ctrl+A).

4. Once script is created, the user will record the first audio segment using the options on the right bottom side, clicking on the "Record" button. A countdown will appear, so that the user can prepare for the segment recording. Once finished, the user will click on the "Stop" button to stop the recording procedure.

5. Then the user can check the current segment video recording by clicking either on "Short test" or on the "Long test" buttons.

6. The user can also record the segment again if needed.

7. Finally, an attenuation can be applied if the video volume is to high to hear the sign language segment properly, by selecting the desired attenuation from the Recording controls section.

8. Now, the user can move to the next audio segment by pressing "Page down".

It is recommended that after finishing the user checks the work in one of the verifying modes ("Forced preview" or "Free preview") in order to verify everything is fine.

In some cases, the user will need to change the fading mode of the recorded audio using mouse buttons however it is not a frequent action.

Also, user has the possibility to remove or insert segments after finishing the work.

APPENDIX: SHORTCUT BUTTONS

Shortcut button	Functionality
Alt+F2	Play
Alt+F3	Stop
Alt+F5	Fast backward
Alt+F6	Step backward
Alt+F7	Step forward
Alt+F8	Fast forward
Alt+Left	Frame backward
Alt+Right	Frame forward
Shift+Alt+Left	Jump backward
Shift+Alt+Right	Jump forward
Shift + Page Up	Get TC in
Shift + Page Down	Get TC out
Ctrl + A	Set current angle
Page Down	Next segment
Page Up	Previous segment
Ctrl + Alt + Left	Move field of view left
Ctrl + Alt + Right	Move field of view right
Ctrl + Alt + Up	Move field of view up
Ctrl + Alt + Down	Move field of view down
Ctrl + Alt + T	Navigate by TC
Ctrl + Alt + A	Navigate by angle
Ctrl + Insert	Insert segment
Ctrl + Del	Delete segment
Shift + F2	Record video segment

Shortcut button	Functionality
Shift + F3	Short test
Shift + F4	Long test
Shift + F5	Edit segment

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