

Checklist for the post-producer’s (or equivalent) activities

The post-producer (or equivalent) is tasked by the film distributor to enable synchronized playback of audio description and spoken subtitles using an existing piece of software, i.e. to create an audio comparison package for the film. The software requires access to the film’s general audio track(s), the audio track for audio description and the audio track for spoken subtitles. The software communicates with and uploads the audio comparison packages to Bioguiden.

Below is an outline of the post-producer’s (or equivalent) activities required to enable cinema-goers to experience a film with support for audio description and/or spoken subtitles.

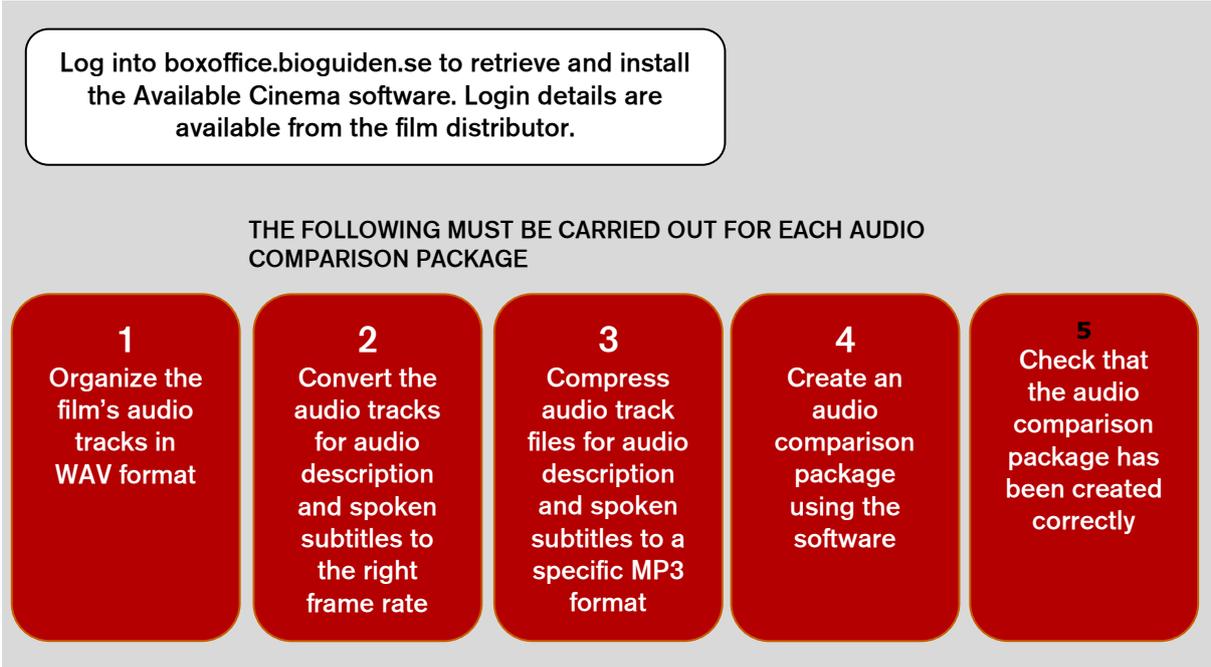


Figure 1. The post-producer’s (or equivalent) activities for Available Cinema.

Log into boxoffice.bioguiden.se to retrieve and install the Available Cinema software	
To create an audio comparison package for the film, the post-producer must use specific software. The software can be retrieved from the Bioguiden box office (boxoffice.bioguiden.se) by logging in with a username and password which is obtained from the film distributor.	
The software can be installed in Windows, OSX and Linux (Ubuntu) environments. The software is installed following the installation instructions for the chosen environment. When installing, a username and an API key are used as parameters for authenticating the software’s communication with Bioguiden. An API key can be found under the “User profile” menu in the Bioguiden box office after login.	
The software is downloaded and installed on a single occasion, after which it can be used to create an audio comparison package for more films.	
The post-producer will be informed of any updates to the software (or the user instructions) by e-mail. It is important to update the software before more audio comparison packages are created.	
The post-producer (or equivalent) must sign a licence agreement to use the software. This agreement is sent out when the post-producer (or equivalent) gains access to the software.	
THE FOLLOWING STEPS MUST BE CARRIED OUT FOR EACH AUDIO COMPARISON PACKAGE	
1	Organize the film’s audio track(s) in WAV format
	The software automatically generates an audio comparison file based on the film’s audio track(s). The audio comparison file along with the audio tracks for audio description and/or

	<p>spoken subtitles jointly make up the film’s audio comparison package that is created. Depending on the type of audio comparison package being created, the audio tracks that can be used are:</p> <ol style="list-style-type: none"> 1. The film audio track(s) in the cinema package (DCP) <i>[Note that the audio tracks in the DCP may be split into different scenes, in which case they will need to be converted into (up to 8) full-length tracks.]</i> 2. Audio tracks corresponding to the DVD and/or TV/VoD version of the film. <p>The film’s audio tracks must be in WAV format when they are added to the software.</p>
2	<p>Convert the audio tracks for audio description and spoken subtitles to the right frame rate</p> <p>It is important that all the audio tracks in the audio comparison package have the same frame rate if the audio recognition solution for Available Cinema is to work. If the movie is being screened at cinemas, the frame rate is most likely 24 fps, while on TV/DVD/VoD it is most likely 25 fps.</p> <p>Depending on the type of audio comparison package being created, the audio tracks for audio description and spoken subtitles may need to be converted to a different frame rate (fps).</p> <p>The audio track for the audio-described introduction does not need to be converted, as it does not need to be synchronized with the film’s sound.</p> <p><i>When the audio track producer delivers the audio tracks for audio description and spoken subtitles, they are urged to be clear about what frame rate the audio tracks have been recorded in (which depends on the frame rate in the screener).</i></p>
3	<p>Compress audio track files for audio description and spoken subtitles to a specific MP3 format</p> <p>The audio track files for audio description and spoken subtitles are delivered to the post-producer (or equivalent) in uncompressed WAV format. They must be compressed as the software calls for a specific MP3 format.</p> <p>The audio track files for audio description and spoken subtitles should be in mono MP3 format with a data rate of a constant 48 kbps. This is to make the audio comparison package as small as possible for downloading into a mobile device, and also the technical solution for Android will not work if the files are not in this format. After compression, audio track files for audio description and spoken subtitles are roughly 30 MB per hour of film per audio track file.</p> <p>The audio comparison file for the audio-described introduction should also be compressed to MP3 format, but there are no other specific requirements as far as format is concerned.</p>

4	Create an audio comparison package using the software
	<p>To create an audio comparison package using the software, the post-producer (or equivalent) must have access to these audio tracks in the specified format:</p> <ul style="list-style-type: none"> ✓ Film audio track(s) in WAV format (1-8). ✓ Audio track for audio description (MP3 format) ✓ Audio track for spoken subtitles (MP3 format) ✓ Audio tracks for the audio-described introduction (MP3 format; not obligatory) <p>At least one of the audio tracks for audio description and spoken subtitles respectively is obligatory for an audio comparison package to be created.</p> <p>Note that the audio-described introduction should only be sent when creating the first audio comparison package (if more than one audio comparison packages are being created for a film).</p>
5	Check that the audio comparison package has been created correctly
	<p>The post-producer (or equivalent) has to quality control that the audio comparison package has been uploaded to the storage platform (Bioguiden), and that it has been created correctly.</p> <p>The following steps are performed on a mobile device running iOS and then on a mobile device running Android:</p> <ol style="list-style-type: none"> 1. Download any of the applications for Available Cinema (the applications are listed in section Fel! Hittar inte referensköll.) to the mobile unit. 2. Check that the audio comparison package for the film is in the application. 3. Download the audio comparison package. 4. Start the film in the appropriate screening platform, so if the audio comparison package has been created for cinema screening, run the cinema version. 5. Start playback of audio description and/or spoken subtitles, and check that they are correctly synchronized with the film's sound. <p>If the audio comparison packages do not work correctly for any reason, the audio comparison package should be removed and recreated. An audio comparison package can be removed by logging into the Bioguiden box office (boxoffice.bioguiden.se). Select the "View movies" menu, find the right film (then click on "View complete") and remove the audio comparison package.</p> <p>Examples of what can cause an audio comparison package not to work:</p> <ul style="list-style-type: none"> • The audio tracks, the audio track for audio description or the audio track for spoken subtitles, are corrupt. • The audio track files have been added to the software in the wrong format.

NB

If a film contains sounds that are recurring (and dominant), the synchronization functionality in the technical solution may not reliably be able to find the right place in the movie; this is because the same sound pattern can be found in several different places. This may cause the playback of audio description and/or spoken subtitles to jump between different points.

One such film is Roy Andersson's *A Pigeon Sat on a Branch Reflecting on Existence/En duva satt på en gren och funderade på tillvaron*, where one of the background noises recurs quite often at points where there is no other sound. For films like this, it may be a good idea to remove the recurring (background) noise from the film's audio tracks when generating the film sound's audio comparison file (fingerprint).