



D7.6 Project video

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Deliverable Information Sheet

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Abstract

This deliverable reports the work done on the creation of video material with the aim of communicating BINCI's objectives and results. Up to now, BINCI has created different kind of video material: a general project video, addressed to broad audiences and general public, that explains the project, its aim, work done, results obtained and expected impact. Besides, a 360° video targeted to audio producers to ease the understanding of the capabilities enabled by BINCI tools and a set of short video clips to show some examples of the experimental productions created for enhancing the visiting experience at cultural sites.

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1 Introduction

This deliverable reports the work done on the creation of video material with the aim of communicating BINCI's objectives and results.

Following the dissemination and communication plan documented in D7.2 and D7.4, BINCI aimed at producing at least two videos useful for communicating the project purpose in an easy, understandable, way.

Up to now, BINCI has created different kind of video material addressed to a variety of audiences covering BINCI main stakeholders: audio producers, large key players that represent the demand in the contents market and society at large, and policy makers.

On the first place, a general project video, addressed to broad audiences and general public, that explains the project, its aim, work done, results obtained and expected impact. Besides, two more audio-visual material have been created in the project: a 360° demonstration video targeted to audio producers to ease the understanding of the capabilities enabled by BINCI tools; and a set of short video clips to show some examples of the experimental productions created for enhancing the visiting experience at cultural sites.

These videos have been published online through the project website www.binci.eu/dissemination/ and BINCI [YouTube channel](#). The videos may be also shared by project partners, the EC and third parties (e.g. news outlets, media) for accompanying communication activities about BINCI.

In the following, we provide more detailed information about the produced videos.

2 General project video

A project video has been produced to communicate and disseminate the BINCI project to general audiences. It is a short video (~3.5 min) to serve as a useful promotional tool to introduce the project (together with other communication material such as the leaflet) and summarizing the main aspects of the project.

In this section we provide an overview of its design, structure and content included, together with some screenshots and publication information.

Eurecat has led the design and production of this video and has coordinated project partners' content and feedback contributions.

The video refers to the same coordinated image and style defined by BINCI visual identity. Voice-over and subtitles are in English to reach a global audience.

2.1 Video structure and contents

In order to design the video, there were defined the following aspects and elements that needed to be included:

- Title and acronym of the logo project.
- Brief project description (key aspects) & project objective
- Tools / solution developed
- Benefits of the BINCI solution
- Demonstrators (productions at 3 tourist sites) / Examples of what can be done with the BINCI solution (User Group productions).
- Impact of the project

- Logos all the partners of the project
- Credit to the EU and H2020.

A script for the video including all the above elements was written making use of storytelling to make the project more understandable and better reach users thanks to a character and a plot. The script includes both the text to be used as the voice-over during the video, subtitles, and the identification of the different graphical material to illustrate each part of the video.

Part of this material was already created (e.g. to document work done) and needed to be collected while other material needed to be acquired on purpose. All partners have contributed to the gathering and acquisition of photo and video material used in the video: Head Acoustics with photos and videos of the work done on acoustic measurements, 3D SoundLabs with video and photo material of their headphones and headtracking devices, Voodoopop with video sequences and photos of artists of BINCI User Group working on the Berlin studio, Antenna International with videos from experiences at cultural sites, Eurecat with material of 3D Audio production tools, SRR measurements, etc. Besides, specific shootings were carried out by Eurecat at Fundació Joan Miró to provide continuity to the story and a closer look at the enhanced visitor's experience.

The video includes a background music track to make the video more appealing. While the inclusion of some binaural audio tracks was considered, it was finally decided to use stereo for the video given (i) there are other specific videos with binaural audio created as demonstrations¹, and (ii) a reproduction with loudspeakers is normally expected for this video.

The resulting script is found below:

AIM	GRAPHICAL MATERIAL	SCRIPT
<i>Introduce the binaural revolution</i>	Person with headphones playing video games, watching cinema, etc.	<p>During the last century, new technologies transformed the audio industry, turning audio and music productions consumed through headphones a big part of our daily activities.</p> <p>Currently, audio technology is experiencing a new advance, the binaural revolution, that enables the widespread consumption of 3D audio content through headphones</p> <p><i>SUBTITLE: The binaural revolution: 3D audio content through headphones</i></p>
BINCI objective and main impact on the CCI	Audio artists working at different scenarios, BINCI tools, BINCI HW	<p>The EU-funded project BINCI has developed an integrated market-ready software and hardware solution to be used by sound designers, producers and artists that eases the production, postproduction and distribution of binaural audio content.</p> <p>BINCI impacts the creative industries with integrated and cost-efficient tools, pushing and pulling the demand of binaural content.</p> <p><i>SUBTITLE: BINCI provides an integrated software and hardware solution for the creative industries.</i></p>

¹ That are linked in the video when published online.

		<i>Eases the production, post-production and distribution of binaural audio content.</i>
<i>What is 3D audio-binaural?</i>	<i>Person puts headphones. Transport to other environment</i>	<p>Binaural audio has the power to immerse users completely into any sound environment, simulating the way humans perceive sound emanating from their surrounding environment in a given space or room.</p> <p><i>SUBTITLE: Binaural audio simulates the way humans perceive sound.</i></p>
<i>BINCI solution: acoustic measurements</i>	<i>HRTF & SRR acquisition material</i>	<p>The BINCI solution comprises innovative acoustic measurement methods, aimed at improving the positioning of sound sources and the simulation of the acoustics of any virtual or real room.</p> <p><i>SUBTITLE: The BINCI Solution: Innovative acoustic measurement methods.</i></p>
<i>BINCI solution: production tools</i>	<i>Plugins material working</i>	<p>Project members have also developed 3D audio software tools: a set of plugins for 3D and binaural audio production compatible with most popular digital audio workstations to encourage the creation of 3D sound contents, and a binaural player to experience the binaural soundtracks in mobile devices.</p> <p><i>SUBTITLE: The BINCI Solution: 3D audio production plugins and a binaural player for mobile devices.</i></p>
<i>BINCI solution: headtracking device and interactive rendering</i>	<i>Close-ups of headtracker and its integration</i>	<p>To provide a full binaural interactive experience, a head-tracking system is also included in the BINCI solution, so the reproduction responds to the head movements of the user providing a more accurate sound localization.</p> <p><i>SUBTITLE: The BINCI Solution: Head-tracking device for binaural interactive experiences.</i></p>
<i>User-centred development, early adopters evaluation</i>	<i>Artists productions (people working)</i>	<p>Professional sound designers and creatives have guided the project bringing their needs and wants and have tested the BINCI tools within their own artistic creations.</p> <p><i>SUBTITLE: User-centered approach: BINCI tools tested by audio production professionals.</i></p>
<i>Validation with real users in cultural sites</i>	<i>Photos / videos demo-sites and closer look at F.J. Miró experience</i>	<p>Furthermore, three experimental productions have been showcased and tested in emblematic museums and cultural sites: Fundació Joan Miró, in Barcelona, the Alte Pinakothek, in Munich, and St. Andrews Castle, in Saint Andrews, Scotland.</p> <p>The productions demonstrate the potential of immersive audio to enhance and transform the visitor's experiences in cultural sites.</p> <p><i>SUBTITLE: Pulling the demand: experimental productions to enhance cultural experiences.</i> <i>Fundació Joan Miró (Barcelona)</i> <i>Alte Pinakothek (Munich)</i> <i>St. Andrews Castle (Saint Andrews, Scotland)</i></p>
<i>Benefits, impact</i>	<i>Person from the beginning putting again the headphones...</i>	<p>BINCI encourages a broader adoption of immersive binaural audio in every dimension. Its technologies integrate into existing workflows, streamline the creation of 3D audio content and make it available to a massive number of consumers. BINCI introduces a new creative language for</p>

		<p>storytellers and experience designers in the fields of music, movies and cinematic VR.</p> <p><i>SUBTITLE: Encouraging the adoption of binaural audio in every dimension.</i></p> <p><i>Introducing a new creative language for music, movies and cinematic VR.</i></p>
Consortium & EU support	<p>Slide with all partners logo.</p> <p>Credit to EU commission.</p>	

Two versions have been created of the video: one with just the voice-over and another one adding headlines summarizing the content being explained. The version with subtitles is suitable for showcasing it at events and for its playback in cases no audio is available. In the following we show some captions of the video.





Figure 1. Some captions of the BINCI general project video



Figure 2. Caption of the video version with subtitles

The video is available on the BINCI website and on [BINCI YouTube channel](#) and can be accessed directly through [this link](#). The video link will be shared and disseminated via the project social media account @BINCI_EU as well as by project partner's social media accounts.

Besides, an uncompressed version is available for project partners to be used by them in disseminating it to the collaborators, their research and business partners.

3 Demonstration videos

3.1 360° video for engaging audio producers and artists

A 360° video with a binaural audio soundtrack was created to support BINCI call for artistic projects made in Nov 2017 and engage the BINCI User Group.

The call for projects was addressed to the BINCI User group (sound designers, audio producers and artists). BINCI partners realized a video could be an excellent tool to introduce them the BINCI approach and “calibrate” their expectations. The video was designed as an aid for understanding the BINCI approach to immersive audio and to give a better understanding of what could be done with BINCI tools. In the video we wanted to describe the ways in which immersive audio can function enhanced with visuals in a 360° environment to make it even more clear.

Partner VoodooPOP led the creation of this demo material (script, visuals, etc.) with the support and feedback from other partners. The script of the video was designed following feedback received during the requirements gathering among artists. 3D audio track samples to exemplify different 3D effects to be included in the demo video were produced by Eurecat.

The video is available at BINCI webpage <https://binci.eu/try-our-demo/> and on [BINCI YouTube channel](#). It can be downloaded to enjoy it with Google Cardboard or with Samsung Gear VR headsets.

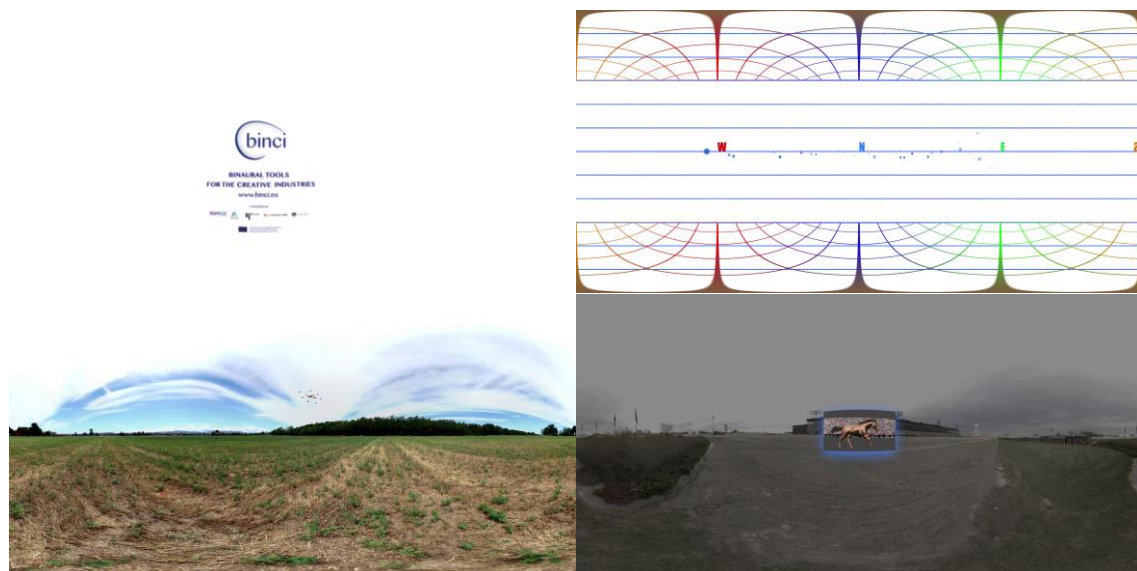


Figure 3. Some captions of the BINCI demonstration video

3.2 Demonstrations of binaural experiences in cultural sites

BINCI has also created a series of short video clips as illustrative material of the experimental productions created within WP7 that are being showcased at BINCI cultural demonstration sites: Fundació Joan Miró, Alte Pinakothek and St. Andrews Castle.

The videos present excerpts of the productions created by the partner Antenna International using BINCI tools corresponding to certain stops of the 3D audio tours designed for each site.

The videos are composed by the binaural audio sample plus a slide with the demonstration information, which remains fixed throughout the video. Static binaural versions have been created to use in these videos, given general audience is not expected to use head-tracker equipped headphones.

Excerpts have been selected jointly by Antenna International and the museums involved. All authorizations to use artwork material and proprietary images have been provided.

The slide accompanying the audio sample was created to provide the needed context for the audience to understand the cultural experience proposed. It shows an image of the painting or area of the museum where the audio is played and the story behind the experience, what is the aim, etc. Needed credits (both for the artwork and the audio) are also included in the slide. Finally, it also shows the BINCI related information and the support of the EC.

In the following figure, accompanying slides are presented.



BINCI demonstration – guide in 3D Audio
Excerpt of the immersive experience at Fundació Joan Miró
(Barcelona, Spain)

Fundació Joan Miró
Fundació Barcelona



Joan Miró: Woman encircled by a flight of birds in the night, 1968. Fundació Joan Miró, Barcelona
© Successió Miró 2018

Specifically composed music tour, evoking an atmospheric approach to Joan Miró's work

STOP 1 – THE LAND

Stop part of a 3D audio tour, which completely focusses on the immersive power of music. The soundscapes are uniquely composed for the galleries of the Fundació Joan Miró and reflect the general themes of each room.

@ 2018 Antenna International & Fundació Joan Miró



The project has received funding from the EU's Horizon 2020 programme. Grant Nº 732130.









BINCI demonstration – guide in 3D Audio
Excerpt of the immersive experience at Fundació Joan Miró
(Barcelona, Spain)

Fundació Joan Miró
Fundació Barcelona



Joan Miró: Painting on white background for the cell of a recluse (II), 1968. Fundació Joan Miró, Barcelona
© Successió Miró 2018

Specifically composed music tour, evoking an atmospheric approach to Joan Miró's work

STOP 3 – Painting on White Background for the Cell of a Recluse I, II and III

Immersive soundtrack created for the visitor's stop at Miró's Painting on white background for the cell of a recluse I, II and III. This 3D audio tour focusses on the immersive power of music. The production invites the visitor to get a glimpse of Miró's artistic inspiration by offering compositions by international sound artists, reflecting the theme of a specific gallery.

@ 2018 Antenna International & Fundació Joan Miró



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BINCI demonstration – guide in 3D Audio

Excerpt of the immersive experience at Alte Pinakothek
(Munich, Germany)

 DIE PINAKOTHEKEN



Carlo Saraceni, The Vision of St. Francis, ca. 1615

© Bayerische Staatsgemäldesammlungen,
Alte Pinakothek, München

Character-based family tour, bringing paintings to life

STOP 12 – The Vision of St. Francis

In this stop of the kids tour, 3D audio helps to cross the barrier of the 2D flat canvas, enter the room and sit next to St. Francis.

Becoming part of the depicted scenery, the children can hear the angel playing the violin to St. Francis and his conversations with the old monarch.

@ 2018 Antenna International & Bayerische Staatsgemäldesammlungen



The project has received funding from the EU's Horizon 2020 programme. Grant N° 732130.



BINCI demonstration – guide in 3D Audio

Excerpt of the immersive experience at Alte Pinakothek
(Munich, Germany)

 DIE PINAKOTHEKEN



Peter Paul Rubens, The Great Last Judgment, ca. 1617

© Bayerische Staatsgemäldesammlungen,
Alte Pinakothek, München

Character-based family tour, bringing paintings to life

STOP 3 - The Great Last Judgement

Due to its immense size of over 6x4.5 meters, The Great Last Judgement is a truly immersive work. The kids' tour uses 3D audio to complete the immersive experience. Sound effects (SFX) lead the eye from the opening graves to the rising dead and Christ, who judges on those who are blessed and those who are damned and sent to hell.

@ 2018 Antenna International & Bayerische Staatsgemäldesammlungen



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BINCI demonstration – guide in 3D Audio

Excerpt of the immersive experience at St. Andrews Castle
(Saint Andrews, Scotland)

 HISTORIC ENVIRONMENT SCOTLAND
 ARAINNEACHD SÀBHARAIÐHEIL ALBA



Saint Andrews Castle

Image courtesy of Wikimedia Commons

Multi-sensorial audio-VR experience recreating Saint Andrews' history

STOP 4 – Saint Andrews Kitchen Tower

In this stop, the main character shares his memories related to the castle's kitchen and leads the visitor inside.

The visitor gets immersed by the kitchen's daily sounds and is placed in the scene as one of the castle's cooks.

@ 2018 Antenna International & Historic Environment Scotland



The project has received funding from the EU's Horizon 2020 programme. Grant N° 732130.





Saint Andrews' Bottle Dungeon
Saint Andrews Castle

Image courtesy of sobolevnm

Multi-sensorial audio-VR experience recreating Saint Andrews' history

STOP 12 – Saint Andrews' Bottle Dungeon

In this stop of the castle's tour, the visitor travels back in time to learn about the dungeon and its temporary prisoners.

@ 2018 Antenna International & Historic Environment Scotland



The project has received funding from the EU's Horizon 2020 programme. Grant N° 732130.

Figure 4. Captions of the demonstration videos of experimental productions for cultural sites

The videos are available on the [BINCI website](#) and on [BINCI YouTube channel](#).

4 Conclusions

We've presented audio-visual material created to disseminate and communicate BINCI: a general project video presenting BINCI, its objectives, results and outcomes, a 360° video showing 3D audio capabilities for artists, and short demonstration videos presenting excerpts of the experimental productions being showcased in BINCI cultural demo-sites: Fundació Joan Miró, Alte Pinakothek and St. Andrews.

The videos are available on BINCI website and BINCI YouTube channel. The videos will be shared and communicated through social media channels (BINCI and partners accounts) and to the relevant media to disseminate the project and its results.