EBU good practice for accessibility 2021-2022
Museums and cultural heritage sites

Copyright EBU 2022
Accessibility and inclusion: the right to participate in cultural life

UNCRPD article 30.1. States Parties recognize the right of persons with disabilities to take part on an equal basis with others in cultural life, and shall take all appropriate measures to ensure that persons with disabilities:

a) Enjoy access to cultural materials in accessible formats;
b) Enjoy access to television programmes, films, theatre and other cultural activities, in accessible formats;
c) Enjoy access to places for cultural performances or services, such as theatres, museums, cinemas, libraries and tourism services, and, as far as possible, enjoy access to monuments and sites of national cultural importance.

EBU protects the rights and promotes the interests of over 30 million people with sight loss in geographical Europe. The UNCRPD is on of the guiding documents for the activities that EBU undertakes in different areas, art and culture being one of them.

UNCRPD article 30 as stated above, implies that the cultural sector has the obligation to make the necessary adjustments in order for their information, products, services and venues to be accessible and inclusive. Many museums and heritage sites in Europe are aware of the need to make accessibility and inclusion part of their policy. Implementing the necessary change and actions may not always seem so easy to them. information, advice and successful practical examples may help to get started or to improve initiatives already in place, incorporating measures to meet the needs of blind and partially sighted visitors.

The EBU collects and disseminates good practice in Europe of accessibility in different areas, shared by its national member organisations. In the past years, EBU called for examples in the fields of employment, mobility, web-accessibility and in 2021 accessibility of museums and cultural heritage sites.

Good practices from 12 countries were collected, all of which you find in this document. The examples are presented per country in random order and contain a selection of images. Contributions may have been adapted, shortened or summarised. Basic editing and corrections were applied, as lack of human and financial resources did not allow for further improvements, including English language corrections.
Accessibility and inclusion: action and good practice

Given the many initiatives launched by the cultural sector with alternative programming in response to the outbreak of the pandemic in 2020, we at EBU had expected to receive some more creative innovative examples, such as inclusive digital content. This has become an important and successful format that reaches a wider audience than anticipated, and is very much appreciated by the blind and partially sighted audiences. Online content opens up a new range of possibilities to access and enjoy art and culture.

We therefore urge museums and cultural heritage sites to include accessible digital, virtual options as integral part of their programming, in addition to and in support of the on-site activities. And to maintain this, also when opening their doors to the public again.

You will find a few examples in this document, but it is worthwhile to check out the many accessible digital options available on YouTube, some museum websites and other platforms, e.g. audio tour with description available on the museum website, museum app with inclusive content that can be used on site and at home, live or recorded workshops, live and recorded descriptive guided tour, descriptive presentations and talks, videos with detailed description of individual artwork, exhibition podcast...

Although perhaps the good practices provided in this publication may not all be that innovative and most approach accessibility in a more traditional way, we feel these can inspire and provide practical tips on how to improve the accessibility for blind and partially sighted visitors. The different levels of inclusion described in the examples, make them relevant for museums and cultural heritage sites that are just starting with accessibility, as well as for the more advanced and experienced ones looking for ways to improve it. We remind you that accessible and inclusive museums and heritage sites work with the Design for All principle and must make sure to offer a variety of tools and formats that make the art experience inclusive of both blind and partially sighted people. We note that in some of the initiatives described in this document, this is still not the case, where focus is on a blind audience and test groups, thereby forgetting the necessary accessible visual elements that those with low vision require, such as contrast, lighting, font types and sizes. We urge you to keep this in mind when preparing for your projects and to ensure that both blind and partially sighted are represented on your advisory teams and test groups.
In compliance with the UNCRPD it is required that blind and partially sighted culture consumers with expertise are involved throughout the project, from its earliest stage to delivery, so as to secure a successful outcome. Some museums do this per project, others have set up a permanent advisory group to contribute to and monitor the implementation of accessibility measures.

Accessibility and inclusion should have a permanent character and be an integrated part of the cultural entity’s policy, and not be a one-off activity. Accessibility of museums and cultural heritage sites is not a luxury or an add-on option, a favour. It is a right and an obligation under legislation. Its implementation should therefore be reflected in the strategies, policies and actions throughout the cultural sector.

We hope these good practices will inspire you and help you take measures that make museums and cultural heritage sites more accessible and inclusive of both blind and partially sighted people, enabling them to fully participate in and enjoy cultural life.

For more information and advice you can contact the museums and the national organisations of visually impaired people mentioned throughout the document, and the EBU culture network by email ebusecretariat@euroblind.org

We would welcome more examples, so if you too have good practice in your country to showcase accessibility of museums and cultural heritage sites, please share these with us by email ebuprojects@euroblind.org We intend to update this document with the additional examples periodically. The latest version will be available from https://www.euroblind.org

A wholehearted THANK YOU to the EBU member organisations that contributed to this publication with the examples from their respective countries, to the EBU culture network members, and to Anja Bakker, for her invaluable assistance.

Birgitta J. Blokland, coordinator EBU culture network
January 2022
1. MACEDONIA .......................................................... 6
   Bitola concept .......................................................... 6
2. DENMARK ........................................................................ 11
   Moesgaard Museum ...................................................... 11
   Tidens Samling – the hands-on museum .......................... 13
3. CZECH REPUBLIC .......................................................... 16
   Regional Museum in Olomouc ........................................ 16
4. POLAND ........................................................................ 20
   The Accessibility Platform of Art, Culture and Tourist Attractions 20
5. GERMANY ....................................................................... 23
   Accessibility in nature: Ground-Breaking Nature ............... 23
   Culture with all Senses ................................................... 28
6. UNITED KINGDOM .......................................................... 33
   Sensing Culture Project .................................................. 33
7. ESTONIA ........................................................................ 37
   Maritime Museum for all ................................................ 37
8. SPAIN ............................................................................ 44
   Costume Museum .......................................................... 44
   Online workshops ........................................................ 46
   Touch, the king of senses ................................................. 50
   The model collection .................................................... 53
   Today, El Prado ............................................................ 56
9. ITALY ............................................................................ 59
   MUSAE International project ......................................... 59
   Anteros and Tolomeo Museums ...................................... 65
   Accessibility and tourist information Bologna .................. 70
   Capitoline Museums ...................................................... 75
10. AND 3 MORE EXAMPLES .................................................. 81
    Feeling Van Gogh – The Netherlands .............................. 81
    3D Model of historical building - Finland ....................... 83
    Online descriptive art events – UK ................................. 86
1. MACEDONIA

Bitola concept
Museum for all and multisensory projects

National Institution Institute and Museum Bitola and the Balkan Museum Network Accessibility Group

The challenge for museums is to change people’s lives, to improve the quality of life, respect human rights, to remove physical barriers but also to provide a multisensory experience, intellectual accessibility, caring for the visitors, understand the needs of the audience, and become museum for all.

Balkan Museums Network provides individual and institutional support. Balkan Museum Accessibility Group, with whom we won the European Zero Award in 2018. The current leader of the project Irena Ruzin participated in the three-year training for accessibility of museums. The intensive training was organized in different cities and countries in the Balkans, where good practices and professional lectures were provided by international experts, as well as practical work. We were trained to work on inclusion and accessibility projects, Museum Accessibility Audit, principles, standards, law, human rights, UN universal declarations, universal design and social model.

Knowledge about accessibility and inclusion, collaboration with people with disability

We are preparing projects, workshops and activities in collaboration with the Associations of the Blind people, Special schools, Resource Center and other Associations (according to signed memorandums for cooperation) They like to be involved in workshops, to learn, express their talents, creativity, explore, suggest and test our outcomes. Their assistants, special educators, are always with us and facilitates communication.

We have perfect cooperation with an expert team, interested in new knowledge and new project activities. We also have contact with people with visually impaired persons from the region who perfectly knows how to use modern technologies for accessibility. We are constantly following new technologies related to accessibility, but it is very expensive and impossible for us to apply. Maybe in the future we will add the element of sense of smell for a better sensory experience (example: Van Gogh Museum and Tiflological Museum Zagreb)
Our important partner are the media that constantly follow and promote us and raise awareness of the importance of accessibility.

During the pandemic we organized an International Webinar for experiences with projects for visually impaired people from the Balkans, and at the end of the webinar we have promoted online our new tactile exhibition.

Bitola Concept: museum access audit, inclusion, tactile images and tactile copies, museum in a suitcase, audio stories, QR, tactile publications, sharing knowledge and experience with colleagues in the region.

Our tactile exhibitions mostly presents objects from our permanent exhibition and several facades of cultural monuments. We have organized seven tactile exhibitions, two of them in Serbia, one in Bosnia, one in Croatia. In 2021 in Slovenia and several Macedonian museums. Texts and descriptions are translated into the language of the host country.

Visiting the Balkan museums with our tactile exhibitions is also promotion of our valuable cultural heritage, sharing knowledge and experience, not only possibility to promotour approach to people with disabilities.

The objects are available to all visitors, not only for people with disabilities. All objects are accessible by touching (images or copies), but also Braille texts. We also have audio narration, a description, because many visually impaired people can not read Braille. The panels on which the tactile images are placed are lightweight, adjustable to any space, where both the photo and the text are placed (besides the tactile image and the text in Braille). The tactile image is actually a relief display of the exhibit, various shapes and textures, printed on special (capsule) paper, on the piaf fuser, printer (provided by Balkan Museum Network).

QR codes are placed next to the museum objects, which by scanning with a smartphone or tablet leads to our accessible website (provided by SoGo), where the audio narrations, sign language videos, photos and texts with descriptions are placed. The smartphones are also used as an audio guide. All records are placed on our website, as well as on YouTube.

This approach is not expensive.

https://muzejbitola.mk/en/category/e-museum/
Our approach and “Bitola concept” it is implemented in several museums in the region, sharing the knowledge and experience: accessibility study for the Museum of Vojvodina in Novi Sad, Serbia and an accessibility study for the National institution Archaeological Museum Skopje, where we implemented the accessibility projects for people with impaired vision. At the moment we are preparing a project with the same concept for the Holocaust Museum, and National Museum of Macedonian struggle and tactile exhibition for Slovenia.

**Results**

It is a great and mutual pleasure when we are organizing visits to cultural heritage sites, events, celebrating important dates and events with people with visual impairments. After workshops, tactile exhibitions, visually impaired people are saying "today we saw wonderful things, see you soon" That is the point of our work!

Somebody said "It is not the same thing if you send an invitation to a party to somebody, it is another thing to invite him to dance!" which means you should not only invite someone to a museum, but include him.

Recently, The University of Sussex from Bryton UK announced the title “Agents of changes” to three of Balkan museum professionals who are working on museum accessibility.
Image: Promotion of Tactile copies from both museums, Knazevac-Serbia and Museum in Bitola- Project Museum in a suitcase, Museum for all Museum to go

Image: Workshop for tactile images

Links
National Institution Institute and Museum Bitola, North Macedonia:
https://muzejbitola.mk/en/category/e-museum/
Balkan Museum Network:
http://www.bmuseums.net/
http://www.bmuseums.net/balkan-museum-access-group/

Contact
National Institution Institute and Museum Bitola, North Macedonia
Project leader: Irena Ruzin Ph.D.
E-mail: Irenaruzin@gmail.com

NATIONAL UNION OF THE BLIND
OF THE REPUBLIC OF NORTHERN MACEDONIA
str. 11 Oktomvri Nu.42 A
1000 Skopje
Phone: +389 2 3 246-537
Email: mknssrm@gmail.com
www.nssrm.org.mk
2. DENMARK

Moesgaard Museum

Moesgaard Museum is a museum nearby Aarhus. The museum exhibits and communicates Danish ancient history, drawing parallels to ancient history worldwide.
At Moesgaard You will find an example of good practice, the Vessel of Gundestrup. The Vessel and the exhibition were developed from 2012 to 2014.

This replication of the Vessel of Gundestrup offering a tactile experience acquired the working title "let your fingers do the walking". It was developed in collaboration with the Institute for the Visually Impaired in Copenhagen (IBOS).
All the figures and cavities are firstly copied through a 3D printing process in wax, thereafter, moulded in metal. The auditive components are specially created for the Gundestrup universe.

About the installation in brief

Goal 1. Equal and valuable dissemination towards persons who are sighted as well as persons who are visually impaired. In general museums are based on a visual way to convey exhibited artifacts, and it is an exception that they may be touched without harming or degrading the exhibits. In this view, there are very few opportunities for persons who are visually impaired to enjoy exhibits at cultural historic museums in Denmark. The goal, hence, was to create a composite installation which could transcend these barriers for both groups.

Goal 2. To create a mythical and divine experience. In our world of today where technology is in full focus constantly, the world of Gods and myths may easily be neglected and forgotten. It is this distancing that the Museum wants to break down - by inviting the guests into this world and offering them surrendering to their senses of touch and hearing. The goal, hence, was to create the optimal sensation of sound and tactile impression which gave a feeling of security and, at the same time, inviting the audience to a world of divinity and myths.
About the Vessel of Gundestrup and the actual tactile installation setup

Hardly any other fund from the Danish age of antiquity can speak to the phantasy than the Gundestrup Vessel from Himmerland (a region in the Northern part of Denmark) with its magnificent universe of pictures depicting mythological tales of people, animals, gods and phantasy creatures. The vessel is probably produced approx. 100 A.C. in the northern part of Bulgaria or in the southern part of Romania and hence expressing a certain contact with the world outside Denmark. The vessel is composed of 14 metal plates of which one is missing. For each of the plates with relief they contain a narrative in the form of pictures and altogether they form an almost three-dimensional "picture book" or "cartoon". With its exquisite degree of details and its very delicate relief effects it forms a true invitation to become basis for examination and sensing through finger touch. The installation is created as an expanded version of the inner side of the vessel with a size that makes it form its own chamber. Through the hole of the missing plate, the audience may step into the inner space of the "vessel" and sense an experience of total inclusion. Through the sense of touch the visitors are guided into the dramatic universe of pictures in a way that again activates the auditory narrative transmitted through a helmet with built in headphones. To enhance concentration and sharpen all available senses the helmet is constructed in a way that excludes the use of eyesight, thereby stimulating the user to sense and listen in a more intensive manner.

Contact

Moesgaard Museum, Moesgård Allé 15, 8270 Højbjerg, DK
Phone: +45 87 39 40 00
www.moesgaardmuseum.dk
Tidens Samling – the hands-on museum

Tidens Samling is a cultural historical hands-on museum of everyday life, in the centre of Hans Christian Andersen's hometown, Odense. The museum is part of Scandinavia's largest private collection of the 20th century. At this museum, it is possible for guests to take a journey through time and get a glimpse of Danish everyday life, up close in 9 living rooms representing each decade from the 1900s-1990s. Each living room is furnished with original and authentic interiors from typical Danish homes. Through hands-on experiences, your own story becomes present while using all senses by sitting in the furniture, opening drawers, and flipping through books. Using senses of touch, smell, and hearing.

In the permanent exhibition guests can:

- Feel the era - by exploring the living rooms and touching the exhibited objects.
- Hear the story - through living narratives via offered audio guides.
- Remember the time - while experiencing the development of the different decades.
- Share the story - across all generations.

The special focused cultural activity Feel the Era - hear the History enhances the accessibility and inclusion for this group of guests, who wish a cultural experience, or to discover history of the recent past on their own terms. At the museum, people with visual impairment are able to visit on their own merit without a prior appointment.

Since all the objects in the permanent exhibition may be touched and examined by hand, visitors can get an immediate and concrete experience of the artifacts of the museum's exhibitions. Due to the specific measures for blind and partially sighted people, they can visit the museum unaccompanied, since guide dogs are also permitted in the exhibition.

Floor indicators

In the museum's permanent exhibition, tactile guidelines have been established in the floor, allowing the visually impaired to navigate around the exhibitions safely and informatively. In the middle of each of the exhibition's living rooms is an attention field that indicates the possibility of activating an audio guide (currently the guide is only available in Danish, the museum is working on developing an English audio version, too).

The audio guide
Specific, information and narratives - by professional narrators - have been prepared for each period of time represented at the museum. The audio guide acts as support for the physical exhibits when the visitor activates and listens to the audio files to enrich and expand the experience. At each living room there is the possibility of 3 short audio choices:

- A historical description of the decade that the living room represents
- A paragraph from a personal diary from the decade
- A description of the style and decor of the specific decade

Feel the Era - hear the History - a collaboration with the visually impaired

A group of user consultants, with visual impairment, were associated with Feel the Era - hear the History during the development of the cultural project, acting as advisors and sparring partners through the communicative initiative.

The user consultants were involved throughout the development of the project - from the idea to the actual implementation at the museum. The follow-up group provided advice and guidance throughout the project and helped test ideas and initiatives as well as point out specific measurements in relation to accessibility.

This invaluable expert knowledge was incredibly rewarding in achieving the best result and made it possible to develop the most optimal experience for blind and partially sighted.

Contact

Tidens Samling, Kulturmaskinen, Farvergården 7, 5000 Odense C, DK
Phone: +45 65 91 19 42 - www.tidenssamling.dk

Dansk Blindesamfund (DBS) / Danish Association of the Blind (DAB)
Blekinge Boulevard 2
2630 Taastrup
Phone: +45 38 14 88 10
www.blind.dk
Image: installation til Moesgårds in museum

Image: Relief of three horses
Regional Museum in Olomouc

Regional Museum in Olomouc ranks among regular cultural institutions in the Czechlands. History of Olomouc museology dates back to the 2nd half of the nineteenth century. Since then, the Museum has undergone a number of changes. The most recent substantial innovation relates to the reconstruction and modernization of two permanent exhibitions on history and natural science carried out in 2012; this renovation can be viewed from two angles. In terms of organization of exhibitions, the innovation represented the departure from traditional systematic object presentation style to incorporating the story and interactive elements which enables easier interpretation of the collected objects. The other modernization intention was to reflect the social change which brought about “the disruption” of the rooted perception of a museum as the location primarily designed for scientists and experts. Thus, room has been opened for as yet neglected groups such as children and the disabled. The new displays have been enriched with haptic exhibits, Braille labels (horizontally located on metal plates), didactic elements, relaxation zones, audio-visual technology, and other present-day comforts.

Permanent Exhibition: Olomouc - Fifteen Centuries of the City

The Exhibition “Olomouc – Fifteen Centuries of the City” introduces both history of Olomouc and prominent historic events. It is divided into seven thematic stops from the 6th century to 1945. A visually impaired visitor may surely be attracted by the option to touch some exhibits fitted with Braille labels. They include, for instance, ceramic vessels from a Slav dwelling, fragments of the bishop’s palace Romanesque ornaments or a sand-rock keystone with the arms of Matthias Corvinus. One can also board the model of the first tram that began to plough the city as early as 1899; in addition, one can enjoy ringing its bell. The whole exhibition journey is accompanied with a combination of varying sounds and music. Thus, the visit experience is being intensified and one can come to the impression of being planted in another place at another time. You can listen to the story of an 11th century illuminator, to medieval monk chant, to clashing of arms and blaring of bugles, to the noise of wall demolition or the sounds of a bustling town on the threshold of the 20th century.

Permanent exhibition: Nature of the Olomouc Region
This exhibition familiarizes visitors with nature in the region, from the lowlands around Olomouc through to the alpine terrain of Hrubý Jeseník. Not only can portions of the nature be thoroughly inspected, but they can be touched or listened to as well. In the first hall, one can explore geological condition of the region. Visually impaired visitors can touch several large specimens of rocks and minerals fitted with Braille labels. In addition, the sliding drawers contain fossils, minerals and rocks available for tactile examination. In a smaller hall, which imitates the mining gallery, one can listen to one’s own echo, touch the pit telephone or timbering. The second part of the exhibition consists of ten scenic pictures with landscape elements, from the lowland to alpine environments along the Morava river flowing down the Olomouc region. These dioramas allow visitors to see various types of plants and animals to be found in the region. Each diorama is equipped with selected interactive and audio-visual elements, often complemented with Braille labels. One can, for example, listen to animal sounds, touch samples of animal hair (in two instances on two stuffed animals) and relief animal footprints; the plant inventory allows touching samples of cereals or dried fruits of trees and bushes. At the stand with medicinal herbs, the haptic plant exhibits are, in addition, complemented with smells. The Museum Meadow lures you to have some rest, to lie down and listen to the singing of flying birds.

**Permanent exhibition: The Story of Stone**

“The Story of Stone” is the exhibition of geology, archaeology and lapidary. It comprises ten thematic stops, telling “the Story” of stone from its most ancient beginnings up to the present. Stone is presented in three basic forms: as a rock, a tool and a work of art.

The exhibits include a number of various rocks, fossils, ores and minerals as well as stone tools, sculptures, reliefs and articles of architecture from Romanesque period to the Baroque. Some exhibits can be touched; all are fitted with print and Braille labels.

**Guided Tours for the Visually Impaired**

Regional Museum in Olomouc provides visually impaired persons with guided tours conducted by the Education Section. These tours are being complemented with tactile activities using the existing artefacts as well as replicas of the selected exhibits. Close attention is paid to selecting the objects characteristic in terms of material, shape and size for individual stops. In the section “Olomouc - Fifteen Centuries of the City”, visually impaired visitors can examine ceramic cups, products made of hard animal materials (bone dice, combs, writing styli, sewing needles, horn-made drinking cups or
signal bugles), wax writing plates, iron-forged products (including arms or armaments), parchment and various kinds of paper or pieces of period clothing.

In the section “Nature of the Olomouc Region”, commentary-furnished tours provide, apart from large quantities of permanent tactile elements, other objects such as whole furs of the selected mammals, animal skulls of various sizes and shapes, or samples of plant or animal fibres.

For a guided tour, low-vision visitors are offered assistive tools – hand-held magnifiers or LED transillumination pads. In ethnographic section From the Cradle to the Grave, open only in 2013, and so far, not noted here, the guided tour is enriched with the tactile introduction to the regional female costume and to a number of period everyday objects used by our ancestors in the recent past. The sounds in this section are represented by a functioning belfry.

**Contact**
Regional Museum Olomouc
náměstí Republiky 5, Olomouc, Czech Republic
[https://www.vmo.cz/](https://www.vmo.cz/)

Czech Blind United (SONS)
[www.sons.cz](http://www.sons.cz)

Image: Visually impaired visitors are examining an exhibit.
Image: Stroke a sheep – a favourite exhibit.

Image: A blind visitor is examining footprints of a wild boar.
4. POLAND

The Accessibility Platform of Art, Culture and Tourist Attractions

Introduction

Blind and partially sighted people like to travel and explore new places. As they cannot fully enjoy the visual experience, they are looking for compensating solutions to deal with the lack of vision. In short, accessible solutions may include: mock-ups, typhlographics or tactile images, audio-description guides, convex maps and plans or thematic meetings for people with visual impairment, etc. Due to technological advancements and growing awareness regarding accessibility, the number of possibilities is increasing. Hence, the idea of creating one of the first accessibility platform of art, culture and tourist attractions in Poland, where blind and partially sighted people will be able to familiarize themselves with various aids facilitating orientation in space, had been set up at the Association.

This initiative also fosters the creation of the needs of visually impaired people, who can also actively use the offers of museums and thus have equal access to cultural goods. The described Platform comprises of two integral parts. One of them is maps and plans reading room which is the first of its kind in Poland. To meet needs of people with technological capabilities, the special and regularly updated database of accessible tourist attractions across Poland has also been launched. The overall aim is to make art, culture and travelling more accessible to people with visual impairment.

The reading room, located in Warsaw, is a place where visually impaired people and teachers of spatial orientation can familiarize themselves with maps, plans and typhlographs of various regions of Poland and tourist attractions. All these items have been prepared with accessibility guidelines and may serve as a vital tool for people with vision loss or impairment. Accessible maps and plans may be an ideal tool in teaching spatial orientation, geography and arts.

Initially, the Institute of Typhlology at the Polish Association of the Blind has moved tactile maps and plans previously collected over the years to the reading room. The growing collection contains maps of continents, regions, countries (including Poland), physical, economic, political, historical and transport maps as well as typhlographics of architectural monuments. The collection has been enriched with a number of models presenting famous relics related to art and culture to make them accessible for people with no vision.
The idea of creating the maps and plans reading room for the blind and partially sighted has been supported by suggestions from spatial orientation instructors, who pointed to the need to create a place in which people with visual disabilities will be able to explore the world by touch.

The institute has provided friendly space and equipment for creating the reading room.

With financial assistance from the Municipality of Warsaw, a subpage with a catalogue of accessible tourist attractions had also been set up.

The online database containing information about accessible museums and tourist attractions in Poland constitutes the important section of the website of the Polish Association of the Blind. On the subpage, visually impaired users may find information about accessible museums in the selected region of Poland.

Prior to launching the web site, a set of accessibility standards had been agreed and staff was involved in the information gathering process based on regular contact with museums across the country to obtain essential information. While gathering information, staff gained necessary data regarding proper solutions for blind and low vision. Among these are: professionally trained staff for persons with disabilities, audiodescription, tactile maps or images, mock-ups, availability of audio guides, etc. These essential accessibility criteria stand for the common accessibility standard that may be implemented in any museum or art gallery.

The database has an in-built search engine such as the choice of region or accessibility solutions mentioned above that enable to filter relevant information. Once a selected museum or attraction is found, a list of accessibility features appears along with contact details and a web address. The catalogue is equipped with tools enabling its future update with new facilities and new modules.

At the moment, the database includes information from over 100 museums in Poland. It is the result of very extensive activities related to communication with museum centres throughout Poland. The list is regularly updated. Members of the Polish Association of the Blind and readers of the "Information Bulletin" are encouraged to send information regarding tourist attractions and accessible solutions for the visually impaired.

The created database is complemented by guidelines of the Polish Association of the Blind regarding accessibility. Users may also find professional publications on accessible and universal design and adaptation. The online database containing information in Polish is available at: https://pzn.org.pl/dostepnosc/. The catalogue: https://pzn.org.pl/dostepnosc/katalog-makiet-tyflografik-i-audiodeskrypcji/
Promotion of accessibility

The project has contributed to promote accessibility. It is also an opportunity to raise awareness among museum staff and widely promote institutions that have implemented accessibility solutions. This initiative has been an opportunity for the Association to prepare accessibility standards and criteria that will make world more accessible. Visually impaired people, teachers or instructors have access to the stationary reading room in Warsaw as well as to the world of culture via Internet by clicking on the catalogue of available accessible tourist attractions. The Platform may affect decision-makers and raise their awareness about issues related to adaptation of space and accessibility for all. People with vision loss should have equal access to museum offer and attractions. It is the message of the project. Such platform boosting access to culture may be easily used in different countries and the more accessible world we make, the better for everyone.

Links

Maps and Plans Reading Room for blind and low vision
Website: https://pzn.org.pl/dostepnosc/czytelnia-map-i-planow-dla-osob-niewidomych-i-slabowidzacych/

The online catalogue of accessible tourist attractions for blind and low vision
Website: https://pzn.org.pl/dostepnosc/katalog-makiet-tyflografik-i-audiodeskrypcji/

Contact

Polish Association of the Blind
Email: pzn@pzn.org.pl
Phone: +48228313383
www.pzn.org.pl
5. GERMANY

Accessibility in nature: Ground-Breaking Nature (Bahnbrechende Natur)

Collaborative project of the German Federation of the Blind and Partially Sighted (DBSV) and the Department of Nature and Urban Development Berlin

Image: Three smiling middle-aged men are standing in front of an exhibition orientation table. One of them is holding a white cane in one hand and the other hand on a tactile relief on the table.

The “Ground-Breaking Nature” project worked on the accessibility of the open-air exhibition in the nature park “Schöneberger Südgelände” in Berlin. This park was formed by an area of railway, used by the railway company of eastern Germany that was cut by the division of Germany after the second world war and was situated in western Berlin. Over 40 years the area was
reclaimed by nature and created a unique nature reservation on the railway tracks. 
The exhibition Ground-Breaking Nature explains the development of the area and the natural mechanisms that work in a place where plants and animals can develop undisturbed. 
The exhibition was enhanced in a collaborative process with audio descriptions of the exhibition tables, with tactile inclusive tables and with orientation help for an independent visit of the area by blind and partially sighted people.

Three general dimensions of accessibility:

1. Information and Orientation
   - description of the directions from the next metro station to the exhibition on a website
   - file with GPS-data to import to a navigation app to guide people to the exhibition and to more interesting places in the nature park
   - tactile floor guidance elements that work in an open-air nature place according to the metal art conception installed in the park,
   - these elements help blind people to find the exhibition using the directions
   - accessible website with all information to the exhibition
   - by these measures the project is the first approach to allow blind people an independent navigation in an art museum the tactile exhibition table

2. Audio Information on the Exhibition Tables
   - the exhibition tables were represented on an accessible website in their original design; all texts are readable with screenreaders and all images and photos are described in detail
   - all texts and audio descriptions are also available in audio format and read by professional speakers; the audio files can be streamed or downloaded on the website or accessed directly from the exhibition tables via QR codes
3. Additional tactile inclusive exhibition tables
   - the additional elements show things that are presented only visually so far; so they have an added value for all visitors; they show the life cycle of wild bees, the sound creation of grasshoppers, different trees, the shape of their leaves, pieces of their trunks etc.
   - in the creation guidelines for good tactile images were used
   - the reliefs are designed as close as possible to the original
   - the reliefs are optimized for open air use and are very durable
   - the characteristic of tactile exploring by blind people were followed like avoiding perspective, too big or too small sizes, as realistic in 3D as possible
Image: A man with a white cane is holding a smartphone and touching a tactile relief of an eagle.

**Process**
- the department of nature Berlin initiated the project and was strongly interested in a collaborative process between the administration of Berlin and visually impaired persons
- blind and partially sighted people were involved in planning, steering and running the project in all stages
- as project partner DBSV ensured the further use of all experiences made in the project

**Results and Documentation**
- the exhibition is present on the website that shows a very innovative and strongly inclusive way of access to nature: [www.berlin.de/sen/uvk/natur-und-gruen/naturschutz/ausstellungen/bahnbrechende-natur/](http://www.berlin.de/sen/uvk/natur-und-gruen/naturschutz/ausstellungen/bahnbrechende-natur/)
- additional information on orientation on the DBSV website: [www.dbsv.org/naturparkberlin.html](http://www.dbsv.org/naturparkberlin.html)
- in the project also recommendation for guided nature tours with visual impaired guests were created: [www.dbsv.org/naturfuehrungen.html](http://www.dbsv.org/naturfuehrungen.html)

**Impact and Follow-Up**
- the project was presented in September 2020; unfortunately because of the corona lock-downs and measurements of social distancing not so many blind and partially sighted people could access the exhibition so far; but the interest in the exhibition is quite strong
- several nature park managements looked at the project and discussed with the organizers to learn from it in making own accessible exhibition projects
- DBSV is constantly in contact with nature park managements who want to offer accessible exhibitions like in the project “Nature without Barrier”

Contact
https://www.nature-without-barriers.eu/de/startseite.html
www.dbsv.org/museum.html
**Culture with all Senses**
Kultur mit allen Sinnen

Collaborative project of the German Federation of the Blind and Partially Sighted (DBSV) and the Berlinische Galerie (museum of contemporary art of Berlin)

Image: A man with a white cane is standing in front of a blue painting on the tactile guidance system holding a smartphone in his hand. A woman with a smartphone is standing on his right-hand side.

“Culture with all Senses” worked on making the permanent collection presentation of the Berlinische Galerie accessible for blind and partially sighted persons. From this general guidelines and recommendations were developed which everyone can use to make exhibitions accessible for people with sight loss. A website and a brochure were created about all project results.
Three general dimensions of accessibility

1. Information and Orientation
   - descriptions of the directions from the next metro stations to the museum on the museum website and in the museum app
   - optimizing visible information in the building
   - braille labels on lockers and toilet doors
   - tactile map of the museum and the exhibition
   - navigation advice based on i-beacons in the inclusive museum app
   - flexible tactile floor guidance system
   - by these measures the project is the right approach to allow blind people an independent navigation in an art museum

Image: A hand holding a tablet showing a painting and a audio stream with a play button underneath. In the background the tactile guidance system on the floor
2. Audio Information to the Art Works
   - general audio information on the background of the art works
   - detailed descriptions of the art works for visual impaired people
   - advice how to use the relief copies of artworks
   - magnifiable photos of the art works optimized for partially sighted visitors
   - advice for orientation based on a positioning system on i-beacons
   - information and English, German, audio and text format, also readable with braille display (by deaf-blind people)
   - the system is open to include more artworks and more types of information like for children, easy language, sign language or other national languages
   - access to all information inside the museum and outside e.g. from home

3. Relief Copies of seven Paintings
   - in the creation guidelines for good tactile images were used and enhanced
   - the reliefs are designed as close as possible to the original
   - different materials as natural as possible are used
   - the characteristic of tactile exploring by blind people were followed like avoiding perspective, too big or too small sizes, as realistic as possible in 3D
Process

- DBSV initiated the project and assured that way a collaborative process between museum and visual impaired people
- blind and partially sighted people were involved in planning, steering and running the project in all stages
- as project partner DBSV ensures the further use of all experiences made in the project

Results and Documentation

- documentation of the guidelines created in the project on a fully accessible website:
  www.dbsv.org/museum.html

Guidelines on how to create

- audio description texts on artworks
- relief copies of paintings
- an inclusive multimedia museum app
- design well readable information for partially sighted people
- concept a flour guiding system
- a brochure in print and accessible PDF-format gives a brief overview on the aspects mentioned: www.dbsv.org/files/ueber-dbsv/publikationen/broschueren/Museen_barrierefrei2019.pdf
- after the project new content connected to the topic were created and published, like guidelines on „how to design guided tours for visually impaired people in museums and in the nature“

**Impact and Follow-Up**

- the project was winner of the CPP-Digitalpreis 2019 - www.cbip.caritas.de/digital-preis/digital-preis
- in the first year more than 1000 persons have used the inclusive museum app
- several museums have created own accessible exhibitions inspired by the project like Deutsche Historisches Museum Berlin, Humboldt-Forum Berlin, Bundeskunsthalle Bonn, Neanderthal-Museum MettmannLWL-Museum Münster
- DBSV is constantly in contact with museums who want to offer accessible exhibitions

**Contact**

German Federation of the Blind and Partially Sighted
(Deutscher Blinden- und Sehbehindertenverband – DBSV)
Rungestrasse 19 – 101079 Berlin – Germany
Phone: +49-30-285387-0
Reiner Delgado, Head of Social Affairs
Email: r.delgado@dbsv.org – Web: www.dbsv.org/museum.html
6. UNITED KINGDOM

Sensing Culture Project

Sensing Culture Project, 2015-2018, led by RNIB, aimed to remove barriers that prevent people with sight loss from accessing museums and heritage sites. Over the three years, four main partner organisations worked with their sites and collections in new and innovative ways – building bridges to blind communities and to ‘learn by doing’ within their sites so that learning could be shared more widely to the benefit of all.

RNIB Project Partners

The Heritage Lottery Fund (HLF) funded the project after a need to improve access to heritage sites was identified within the heritage sector and organisations supporting blind and partially sighted people. Four museums and heritage sites took part in the project including:

- Canterbury City Council Museums including Canterbury Cathedral and Beaney House of Art and Knowledge
- Oxford University Museums and Collections including Museum of Natural History
- Portsmouth City Council’s Arthur Conan Doyle Collection, The Richard Lancelyn Green Bequest
- Sussex Archaeological Society, Lewes Castle
Involvement of blind and partially sighted people in the project

Blind and partially sighted people were involved in the project from its early developments to delivery, making new accessible experiences available within the partner museums and heritage sites.

Blind and partially sighted people were involved in the project from development to delivery, not just as end users. A culture of focus groups was established at development stage, with groups informing the direction and output of the various activities. Recruitment of participants, whilst difficult at first, came through networks, contacts, or word of mouth. Target audience input was a vital part of the process and enabled the partners to meet visitor needs. Over the life of the project, 17 focus groups were conducted. Through these, 91 blind and partially sighted people directly provided feedback, to inform the project’s development.

Objectives

The objectives of the Sensing Culture Project were to:

- Enable project partners to provide and promote exemplar services to open-up collections and increase sustainable heritage learning opportunities for blind and partially sighted (BPS) people. This was to be done via:
  - Training and development of skills for staff and volunteers
  - Enabling blind and partially sighted staff and volunteers to act as ambassadors and mentors
  - Creating a network of professionals to collaborate, share experiences and efficiencies, and learn from each other
- Increase heritage learning opportunities for blind and partially sighted people, enabling them and volunteers to independently learn about and access their heritage.
- Enable blind and partially sighted visitors and project participants to take part in activities to influence change by being involved in local heritage decision making and learning networks.
- Support staff and volunteers in working with blind and partially sighted participants, using an innovative approach to engage with the blind and partially sighted community and make more effective use of volunteers.
Resources and best practice

As part of the legacy of the Sensing Culture Project, the team worked on resources that would encourage the heritage sector, academics and people with sight loss to work together to further develop and widen the impact of the project. This included case studies of museums making their exhibits accessible for people with sight loss. In addition, the resources also included best practice to help support museums to deliver accessible experiences.

Case Studies

- Oxford University Museums: 3D Models
- Canterbury: The Art of Making Project
- Canterbury Cluster: Beaney Butterfly Machine
- Oxford University Museums: Touch Tours
- Conan Doyle Collection: Writing Residency
- Conan Doyle Collection: Sensory Touring Exhibition
- Lewes Castle: Explorer bags

Best Practice

- The basics of guide dogs and canes
  It is not always possible to tell if a visitor is blind or partially sighted. Don’t assume that all partially sighted people are totally blind. Guide dogs and canes are more obvious symbols of sight loss; however, these aids aren’t used by everyone.
- Identifying and addressing barriers: access audits
  Blind and partially sighted visitors will have different conditions and degrees of sight loss which will affect how they experience the museum. It is important to understand their barriers to the collections and museum exhibits.
- Meeting, greeting and guiding
  Let blind or partially sighted visitors state what kind of help they need.
- Websites and online information
  Websites contain a wealth of information but are often not accessible. The websites must be appropriately designed to allow blind and partially sighted people who use assistive technology such as screen readers and magnification access the information independently.
- Social media guidelines
  Blind and partially sighted people will probably have their own ways of making social media accessible on various devices. Make sure guidance on alt-text, captions, audio description, hashtags and other features that enhance accessibility are followed.
• **Print guidelines**
  Print guidelines are designed to help ensure that print and e-documents can be accessed by a wide audience. These guidelines can be applied to any documents making them easier to read and facilitating conversion to other formats such as large print, braille or DAISY.

• **Marketing (awareness)**
  Information does not reach blind and partially sighted people easily but they are more likely to consider making a visit if they are made aware that a venue has facilities such as audio guides, talks or hands on sessions.

• **Audio Description**
  Audio Description is one of the best ways for blind and partially sighted visitors to access museums and heritage sites. This is especially true for exhibits that do not have a tactile element such as photographs and paintings.

• **Technology, access and the museum sector**
  Although not always aimed at blind and partially sighted visitors, developments such as Touch tables, audio guides and podcasts, sound posts, Pen Friend, 3-D Printing, iBeacons and apps can be used creatively to increase access for a range of visitors, and offer multi-sensory interpretation.

• **Tactile images with braille information**
  Tactile images enable people to have a touch experience with objects and images that would not normally be accessible to them.

**Contact**

RNIB (Royal National Institute of Blind People
Email: sonali.rai@rnib.org.uk
https://www.rnib.org.uk
Maritime Museum for all

Estonian Maritime Cultural Heritage in Fat Margaret.

Abstract: Estonian Maritime Museum in Fat Margaret is the first museum in Estonia to offer equal opportunities to enjoy Estonian Maritime Cultural Heritage for visitors with special needs. The solutions are developed in close cooperation with representatives from these target groups.

Detailed description:

The goal of the project was to work out the solutions the target groups themselves require to enjoy a visit to a museum, located in an historic site. First Estonian Maritime Museum in short (EMM) identified the possibilities both financially and deriving from the heritage restrictions.

Then EMM contacted Estonian Chamber of Disabled People (EPIK), who compiled a document, an expert opinion, that was followed by many workshops, consultations, tests and prototyping to find the best solutions.

As a result, the Medieval Cannon Tower Fat Margaret and the new permanent exhibition of EMM “Towering Tales of the Sea” is up to 90% accessible for the visitors in wheelchair, two of the Medieval doorways are not possible to widen due to the heritage restrictions.

An extra entrance with automatically opening doors and a ramp was built in addition to the historic entrance, all doors open to sides to interfere the movement of visitors as little as possible. All ramps are with required tilt angle, the walls next to the stairs and ramps have handrails. Floor materials are non-slip.

Fat Margaret is the only tower in Old Town Tallinn (a UNESCO Heritage Site), that has an elevator to move from the basement to the open roof. The elevator has sound announcing in it for the blind, the buttons have Braille numbers on it.

The exhibition furniture is wheelchair-accessible and the distance allows at least 1500 mm in order to be passable with a wheelchair and there is enough space to move a wheelchair.

For the partially sighted and blind visitors to plan their visit, the website of the museum is adjustable (in Estonian only, see VAEGNÄGIJATELE button on the site), the homepage is adaptable to the screen reader programs.

There is a thorough description about the accessibility on the webpage (in Estonian)

www.meremuuseum.ee/paksmargareeta/kulastusinfo/ligipaasetavus/
The description covers:

- Location and access
- How the exhibition is located in Fat Margaret
- How to enter the museum
- How is the reception area and moving around at the museum
- Scanning of the ticket
- Wardrobe
- Toilets
- Café and shop
- Exiting the museum
- Descriptive audio tour
- Sign language

EMM learned during the project, that a visitor with special needs does a thorough research before their visit and has put a lot of effort to the website, we are planning to do the same in other languages.

For the blind visitors the whole journey is marked with a tactile guiding line and marks on the floor. The descriptive audio guide can be rented from the ticket office, it is a device, that is tactile and uses Braille. The audio guide includes a descriptive tour of how to move around the museum, guides the listeners attention to different themes in exhibition, the tactile (3D printed replicas) of objects and the signs in Braille. In addition, it describes the environment and introduces the visitor to Estonian maritime history.

Throughout the exhibition the tactile guidelines take the visitors from the elevator to the tactile floor plans, that give an overview of the exhibition on that floor.

The signs in Braille open the themes specific to the floor, the tactile ship models are made as small-scale replicas of remarkable ships in Estonian history – the cog wreck (exhibited in full size in Fat Margaret), sailing ship Tormilind, steamer-icebreaker Suur Töll and the motorship Sütiste. The 3D printed Fat Margaret and historic Great Coastal Gate small scale replica helps to grasp the proportions of the building the visitor is at.

All the replicas were made with close cooperation with Mr Jakob Rosin from the organization for the blind, as a result the replicas use different materials and textures to give the information about colours and materials.
There are many audio solutions with Braille signs, that make the exhibition enjoyable for the partially sighted and blind visitors as well.

The exhibition graphic design is made in contrasting colours to help the partially sighted to move around more easily.

For the visitors with hearing disability the induction loop is installed to the ticket office and on the exhibition floors, to our known knowledge we are the only museum in Estonia with such opportunities.

The videos have Estonian sign language as one of the language options. The translations were made together with the Estonian sign language interpreters (http://www.viipekeeletolgid.ee/), and the project resulted in many new signs for different specific maritime terms were created, that was exiting to the Estonian deaf community. The respective labels are on the ticket offices and next to video screens.

The hands-on solutions are made both for the families with children, visitors with learning difficulties and people with mental or intellectual disability, making the difficult harbour history themes more comprehensible.

Throughout the exhibition we used the principles of universal design. The exhibition is designed to support and enhance the visitor experience for all target groups – many people obtain the information better by touching, not only the blind and partially sighted; the guiding lines on the floors help to orient all the visitors, to whom the building is difficult to move around.

We enable the visit to the museum free of charge to the visitor with special need, upon showing evidence, in addition the visit is free of charge also to their accompanying person.

The descriptive audio guide is 2 EUR.

In the first months after reopening (Dec 2019-March 2020) we have issued 447 such free of charge tickets, after reopening in May 2020 there have been 312 tickets issued upon showing evidence.

Both the museum cashiers and museum guides were trained to welcome visitors with special needs, the training was carried out by the Estonian Chamber of Disabled People.

Thirteen EMM employees from different departments took part of the 3-year Erasmus + TANDEM (Tools And New approaches for people with Disabilities Exploring a Museum) mobility project, where seven European museums travelled to the institutions to exchange experiences about the possible solutions available to offer to visitors with special needs. More about the project: https://www.tandem-eu.com/

As a result, EMM has been invited to share their experience in tourism and museum events
The total cost to realize the project “Equal opportunities to enjoy the Estonian Maritime Cultural Heritage in Fat Margaret” was 64 000 EUR.

The project was supported by National Foundation of Civil Society (https://www.kysk.ee/nfcs) with 15 000 EUR.

Photos of the process of testing the solutions:

Image: Blind consultant testing the floor plan in a meeting.

Image: Tests of the different hands-on solutions.
Image: The tactile guiding lines on the first floor have been installed (entrance, ticket office, floor plan location).

The testing of the touchable floorplan – the designer is showing the right height and angle that resulted from the test with the blind consultants.

Project:
Equal opportunities to enjoy the Estonian Maritime Cultural Heritage in Fat Margaret.
(Võrdsed elamuslikud võimalused Eesti merekultuuripärandiga tutvumiseks Paksus Margareetas)
Project duration: 2017-2019

Museum:
The Foundation Estonian Maritime Museum (SA Eesti Meremuuseum)
Tallinn, Estonia
www.meremuuseum.ee

The persons and institution involved in realization of the project:
Mrs Helen Kask
Estonian Chamber of Disabled People https://epikoda.ee/

Mr Jakob Rosin
North Estonian Blind Association
https://ppy.ee/eng/
Estonian Association of the Deaf
http://www.ead.ee/

Estonian Support Association for People with Intellectual Disabilities
http://vaimukad.ee/en/

The descriptive audio tour and tactile floor plans are compiled with KAKORA
http://kakora.sarasyl.com/
Mrs Kaidi Roots, Christel Sogenbits, Aive Peil, Sülvi Sarapuu, Liisi Selg and
Kai Kuusk.
Contact

Estonian Maritime Museum
Teele Siig
Project Coordinator SA Eesti Meremuuseum
Email: teele.siig@meremuuseum.ee
Vesilennuki 1, Tallinn 10415
Phone: +372 58046500
www.meremuuseum.ee

Estonian Blind Union
Jakob Rosin
Email: epl@pimedateliit.ee
Phone: +372 641 1972
https://pimedateliit.ee/
8. SPAIN

Costume Museum

An accessible, multi-sensory, didactic area was created by the Museo del Traje (Costume museum) in Madrid in collaboration with ONCE and its Museo Tiflológico, through technical advising on accessibility.

Measures:

The unique characteristics of the conservation of textile collections and clothing create the necessity for special conditions for showing these items. These special conditions can hinder its appreciation by the public with disabilities.

Considering this difficulty, the Museo del Traje has taken several measures aimed at making the museum accessible for persons with a disability, both the venue itself and its content, to facilitate, to the extent possible, access to its collections and the needed information.

As for the accessibility inside the Museum, the following adaptations have been made:

1. At the entries to the museum, there is an embossed blueprint of the museum with indications on braille about the museum, its structure, accessibility, and ongoing activities.
2. From the entry, there is a system of assisted guide: rail, kerb, or podotactile pavements, depending on the area, that safely lead persons with a visual disability during their journey through the museum and towards the building's access.
3. Creation of information sheets on exhibition areas printed in large print and large images that illustrate key elements that the museum wishes to highlight. This material, along with the optional use of audioguides, supports the autonomy of the museum visitors.
4. Museum web page configuration allowing an "only text" option so that screen readers can read the web.

The proposed museography was developed in collaboration with ONCE, thinking about blind people and focusing on the following topics:

- Orientation floor plan showing the space where the visitor will move around. Explanation of the identifying codes of the pieces and museum labels
- Audioguides with acoustic focusing technology. about the contents of the exhibit.
- The historical evolution of the human silhouette through 16 women busts and 6 busts of men that indicate the evolution of the torso, waist, and height of the waistline in chronological order.
- Introduction to the tactile history of suits, based on the evolution of said clothes shown through the representation of 20 suitson manikins adapted to show the appropriate historical silhouette.
- A textileteque with a sample index of different materials, fivers, and fabrics grouped by families of textures used to make suits.
- Objects related to fabrics and manufacturing of clothes. Tools and utensils used to produce threads, fabrics, and clothing. In this display, the original tool will be shown.
- Pattern table where information about patterning books is offered. This proposal was carried out with embossed historical patterns, as well as the presentation of the patterns of several clothing pieces offered, manufactured, by touch.
- It is possible to visit the tiflological area using a blindfold to reinforce the sensorial experience.
- Since 2011, the Museo del Traje offers in its programming guided visits guided by persons with visual disability.

Considering that the clothing inside the showcases cannot be touched to preserve the pieces of the collection, persons with visual disability valued these adaptations that allow them to enjoy the contents of the museum in a closer and more appropriate way for them.

Users emphasize the pleasure of touching the fabrics and busts that allowed them to get an idea of the evolution of different eras and understand the quality of the selected pieces.

Contact
Museo Tiflológico ONCE
museo@once.es
https://museo.once.es
Online workshops

The Museo Tiflológico is original and unique due to the fact that it was created and designed by and for blind people. It is tailored to their needs on the basis of the difficulty these persons find to access the national heritage in the field of knowledge. The museum works in this area with activities both online an onsite.

Art, images and video descriptions are line of the knowledge of the virtual activities carried out from May 2019, in the framework of the "Cultura Global ONCE" project, that reaches a significant number of our affiliates, using accessible digital, technological and methodological resources.

Two online activities aimed at a young public were "The true Magic of Harry Potter" and "Create your own constellation". The two workshops specially designed to be accessible to participants with different visual conditions as well as attractive due to their unique themes (magic tricks, film post-production special effects, observation of the sky and its constellations).

The first workshop, "The true magic of Harry Potter," took place in March 2021 and was dynamized by the professionals from "Menuda Peli," with the collaboration of a professional magician and the museum staff.

Before carrying out the activity, we looked at the technical aspects of the online session and inclusive communication to consider the best possibility for the visual diversity of the group.

90 participants, with ages ranging from 11 to 18, attended the virtual workshop. It is also worth noting the additional participation of non-affiliated family members and friends wanting to come along

The participants were divided into different groups, according to age ranges, to adapt the communicative difficulty, as well as the accessible descriptions for those with severe visual impairment.

This activity stood out because of the explanatory difficulty of its contents. Thanks to the commitment of everyone involved, this was not an obstacle to the participants' enjoyment and understanding of the "visual" processes. They could even be the protagonists of the deceit of magic.
The content evolved around the sentence "The magic of Harry Potter is very well organized." The direction and post-production techniques needed to obtain a good result of the magic were explained from the point of view of this saga.

- Croma what it is, what effects it creates, and how to use it, with a demonstration from Asis and Rosa, that was also described, referring to Harry's invisible cloak.

- Foleys: Post-production staff dedicated to the creation of inexistent sounds associated with spells. Participants heard some sounds, were taught how to create their own sounds with things they might have at their disposal, such as sand, pots, or spoons.

- Fragments from the film, audio described by the ONCE Audesc Service.

- Other secrets about the saga that make it so popular; secrets about the characters, locations, and plot development.

The activity ended with the intervention of a professional magician who explained how to perform a simple trick based on touch using the “card forcing”

It should be highlighted the great response and enjoyment of the participants that were interested in how to create magic beyond their Harry Potter hobby, asking questions about the making of the film, famous scenes from the movie, and other magic tricks that they could perform from home.

The second workshop, "Create your own constellation," took place in April 2021 and dynamized by a professional divulger of astronomical topics in collaboration with a museum guide.
We divided the 45 participants into two age groups, 5 to 8 years old and 9 to 12 years old.

Aside from being another descriptive challenge of a theme with many visual elements, this workshop stands out because participants also received additional accessible resources so that they could follow and enjoy the activity.

Material designed by Astroafición and made by ONCE's Bibliographical Service, was sent to each participant:

- Embossed constellation atlas (printed using a fuser furnace) helped the participants understand the figures, routes, and distances of the most famous constellations dinA3 measure.
- A DinA4 paper with dots that serve as a guide to draw any constellation they want, or a real one, using play-doh dots. It starts from an embossed dot of a greater size that is used as a starting point for the touch route and the placement of the dots where stars are located.
- A list of constellations of interest, printed both in ink print and braille.

Image: Watching a fragment from the audio described movie, Hercules.

Constellations were explained dynamically as cultural creations based on "drawings of the stars in the sky." Curious and changing interpretations of the shapes and mythological stories told in the workshop.
Image: Exploring a tactile constellation atlas taking about their shapes and stories.

Thanks to the materials provided to participants and the quality of a professional’s explanations, the workshop brings those interesting details of the sky in a tactile, narrative, and very attractive way to youths with severe visual disability.

**Contact**

Museo Tiflológico ONCE  
museo@once.es  
https://museo.once.es
Touch, the king of senses

Museo Tiflológico

Exceptional experiences in inclusive lines

The activity "Touch, the king of senses" took place during Christmas of 2019.

Accessibility: In this activity, the works talk in pairs around symmetry, offering two visions of a theme, translated into sculptures. The six pairs were placed in the temporary room of the museum, allowing its tactile observation as if they were the two sides of a paper sheet.

Six blind persons guided the visitants. Each one of them was, at all times, by one of the sculptural groups, while another two people dynamized the activity and guided the visitants as soon as they entered, so they went from one sculptural group to the other.

Image: Woman wearing a blindfold touching different pieces while she is being guided.

The haptic dimension was the primary perception mode in the selection of the works for this exhibit, meaning the selection was made by persons with a visual disability without formal training in art in two participative sessions. Through a democratic process, users showed their predilection for 12 works of different styles, introducing a polyhedric of sculpturing.
This way, the perception of shapes, materials, and intentions through the analytic touch of the users, along with the synthetic and contextual information given by the Museum technicians, has shaped this unique journey materialized in the sculptural pairs shown.

Thus, the sculptures' haptic information, such as materials used in the piece, the temperature of the pieces, roughness or superficial finishing condition its shape or geometry, thus being a complement to visual information.

Another innovative aspect of this showing in the natural co-existence between sculptors with and without disability. In this respect, the concomitance of the works shown is a normalizing fact of both kinds of artists' craftsmanship. In the end, it's the craft, the defining factor of the quality of the sculptures.

In addition to visiting the different pieces blindly (even the people without a visual disability thanks to the darkening of the room). Visitors could access information from the caption, through the complementary description through a QR code, and through the oral communication with the guide standing by each sculpture on the key points of each work. Based on the visitors' opinion, asked at the exit, the result was very satisfactory. The thought all aspects of accessibility had been taken into account to promote inclusion.

Image: People wearing a blindfold ready to enter the darkened showing room.

This activity was shocking to the visitors without a visual disability because first, they had to adapt to darkness, face their fears and trust the guide they
were holding to. Beyond the challenge of trusting their guide, they had to open their perception through touch, see with their fingers, learn a new way of recognizing shapes, and enjoy the sense of touch.

It is interesting to know the visitors' thoughts that, in addition to facing darkness successfully, knew how to define the recognition of the sculptures as an enriching experience from the artistic point of view.

To sum up. An inclusive project that allowed blind people to be the protagonists and invite the public to empathize, experiment, and "see" art with other eyes.

**Contact**

Museo Tiflológico ONCE
museo@once.es
https://museo.once.es
The model collection

ONCE’s Museo Tiflotecnológico, Madrid (Spain) its model collection

Measures: since its opening in 1992, one of the museum’s collections comprises forty models, reproducing Spanish and foreign monuments, all of them part of the UNESCO World Heritage List.

The actual monuments are not accessible, due to their size, either to blind people or people without visual disability.

That is why accessible models are made, as an opportunity for these people to get to know the monuments and examine their different parts in detail, as a way to open a door to culture and initiate the way towards understanding equal education and formation of blind persons and persons with visual disabilities.

Image: Person touching the towers of the Basilica del pilar. 3D printed model made of plastic.

Result: all of our models are scaled, didactic, identic pieces created by professional model creators to be touched by blind persons finished with their original colours so that persons with visual deficiencies models can observe them.
 Throughout the years, the collection has incorporated monuments of different architectural styles in such a way that the national monuments room is ordered chronologically with 24 models, amongst these Cave of Altamira paintings, the Lady of Elche, General view of The Alhambra, Royal Palace. (Madrid, Temple of Sagrada Familia.

While in the foreign monument room, visitors can find 16 International emblematic buildings, such as Eiffel Tower, Statue of Liberty, Taj Mahal, The Parthenon and Colosseum.

See for overview of all models:

https://museo.once.es/la-coleccion/sala-de-reproducciones-de-monumentos

Every model is made with different materials: wood, metal, bronze, marble, etcetera, that offer different textures contrasting with the gardens and green zones made of wool and natural silks, contributing to the tactile richness of the model.
Image: Hands touching the model of the Altamira Caves paintings coated polychromed wood.

In addition to audio guides that give information about the different pieces, the museum also has trained guides to offer guided visits. These visits are composed of two levels: the first level, a tactile route, is followed by a second level with information adapted to visitors with a medium level of education.

The models are an example of accessibility. From the start, they have been well received. The models bring within reach the possibility of discovering and learning to both persons with any disability (physical, sensory or mental) and those without any disability.

Visit tour and learn with these models is a social conquer accessible to all publics.

**Contact**

Museo Tiflológico ONCE  
museo@once.es  
https://museo.once.es
Today, El Prado


Throughout the whole process, ONCE has advised the Prado museum on the making of the exhibit ‘hoy (Today), el Prado’, taking part in the different development and implementation stages of the available accessibility tools within the framework of actions aimed at enabling the accessibility of the national historical and natural heritage, composed of cultural interest assets and Protected Natural Spaces, ONCE carries out.

Adaptations made on facilities, collections, monument sites, routes didactic workshops play a crucial role in making access to this heritage accessible to persons with visual disability, taking as reference the specific need of persons with disabilities, having as background the attainment of universal accessibility.

This is the first tactile exhibition in Spain and also the first exhibition accessible to persons with visual disability.

It’s been taking place in the room of el Prado since 2015. Nowadays it’s a traveling exhibition. The exhibit is formed by paintings of the el Prado Collection made in blind embossing, which allows its tactile reading.

The six selected works are:

- Noli me tangere by Corregio
- Vulcan’s Forge by Velazquez
- The Parasol by Francisco de Goya
- The Mona Lisa by the workshop of Leonardo da Vinci
- The Nobleman with his Hand on his Chest by El Greco
- Still Life with Artichokes, Flowers, and Glass Vessels by Van der Hamen

The technique used to emboss these works is called Didu and was done by the photographic lab Estudios Durero located in Bilbao. They apply several primer layers of up with different textures of up to 6 millimetres to a high-resolution photography of the painting.

Didu printing doesn’t particularly stand out on a visual level, so it will be fair to say that this method respects the original works’ colour scheme and proportion.
Thanks to the possibility of layer printing, which captures details of the great value of the paintings, this technique allows the visitor to go further and sense figures, postures, and basic elements present in the composition.

The tactile reading of the details of a pictorial work of relevance, e.g., clothing, skin colour, background elements, or facial expressions, is definitely worth it, as is the visit.

Following up on the collaboration with ONCE, the exhibition is completed with braille panels and signs, support audioguides that give necessary indications to complete the tactile route of all pictorial works.

Visitors can also wear, if they so wish, opaque glasses to block vision to enjoy a whole sensory experience.

At the same time of the opening of this exhibit, El Prado started a brand new service of audioguides that includes the audio description of fifty-three works of its collection. This description is more detailed in fourteen of the museum’s masterpieces.

These detailed explanations about characters, themes, and the elements represented in the artworks are specially aimed at the public with visual disability.

The access to the contents has been supplemented with tailored support in Spanish sign language (sign guide). The museum also has a hearing loop in its auditorium.

Within the framework of an accessibility renovation, the goal is to strengthen principles such as participation, cooperation, autonomy, and dialogue in the museum sector. All of this based on the goal of facilitating access to art and culture to persons with functional diversity.

The Conservation and Research Deputy Director of El Prado, Andrés Ubeda said that this exhibit was a source of pride for the first picture gallery: “We want a Prado museum that is social. To bring el Prado closer to everyone so they can enjoy the museum collections.”

The exhibition commissioner highlighted that all reproductions are done in colour. “So that they resemble the original paintings as much as possible. And the visitors with visual disability can be appreciated better.

Visitors with visual disability enjoyed the tactile recognition experience with joy, recognizing contours and, being able to distinguish, through textures, the
different elements, for example, the skin of hands and faces, that was different from the textiles or the buildings.

Visitors mainly expressed a positive opinion about the proposed tactile exploration and the orientation provided by the audio guide, which was very useful. It is also worth noting what some visitors mentioned that They could, at last, form a mental image of those famous paintings they had heard so much about.

To sum up, another step towards the accessibility of El Museo del Prado, in collaboration with ONCE, and with a good outcome, that, nowadays, can be enjoyed on its traveling route.

Contact
Museo Tiflológico ONCE
museo@once.es
https://museo.once.es
9. ITALY

MUSAE International project

MUSAE Project (Musei, Uso Sociale e Accessibilità come contrasto all’Emarginazione - Museums, Social Use and Accessibility to Fight Marginalisation)

Introduction
The MUSAE international project (with partners in Greece and Poland), which started in 2018 and is running until 31 October 2021, was created by a broad partnership, including the local branch of the Italian Union of the Blind and Partially Sighted in Perugia, with the aim to improve the accessibility and usability of the public spaces dedicated to historical, artistic and cultural heritage in the Umbria Region, through the elimination of the barriers that prevent persons with disabilities from fully enjoying art, and the organisation of relevant awareness-raising activities.

Involvement of blind and partially sighted people
The Perugia branch of the Italian Union of the Blind and Partially Sighted has been fully and actively involved since the start of the project, at both the design and implementation phases, together with the Association of the Deaf and the Senile dementia /Alzheimer Association.

Accessibility measures
- With the aim of overcoming the remarkable difficulties involved in trying to make medieval and Renaissance art accessible to persons with disabilities, the art content of 4 museums in the Umbria region [i.e. Galleria Nazionale dell’Umbria (https://gallerianazionale.dellumbria.it/en/), Palazzo della Penna Civic Museum (http://turismo.comune.perugia.it/poi/museo-civico-di-palazzo-della-penna), Museum of Palazzo Baldeschi al Corso (http://www.fondazione.cariperugiaarte.it/palazzi/palazzo-Baldeschi/), Brufa Sculpture Park (https://www.umbriatourism.it/it/-/parco-delle-sculture-a-brufa)] was made accessible through:
  - QR-code-activated audio-descriptions, elaborated by the Italian Union of the Blind and Partially Sighted, taking into consideration the specific needs of persons with visual impairments when describing art items (that is, including information of the body position, colours, shape and gestures, etc.) in the paintings;
  - info sheets on the same works in Braille and large print;
- relief tables, 3D and multi-material tactile translations of works, as well as special attention to producing and making available materials for deafblind people;
- video guides in the Italian Sign Language (LIS);
- some ancient, important sculptures were made available for tactile exploration;
- outlining guidelines and good practices for museum accessibility produced in collaboration between partners, beneficiaries and museum staff, also through Focus Groups.

What makes this practice so interesting

1. During the project two kind of trainings were held: 1) for museum staff/operators and 2) for all interested citizens with and without disabilities and, in particular, artists and students of the Academy of Fine Arts. The purpose of this training was to raise awareness on how to adequately accommodate people with sensory, communication and cognitive disabilities facilitating their access to art works.

Image: Simulation glasses for training.
The second training was structured as follows: a one-day workshop for ordinary museum visitors to give them the experience of creating multi-material tactile art objects and a more structured, broad and professional mini-course for artists and students of the Academy of Fine Arts of Perugia, aimed at enabling them to create multi-material tactile translations of artworks.

Image: Making of a multimaterial tactile human portrait.

Both kinds of training included, at different levels, information on typhlological issues, a session where trainees were blindfolded or wore earmuffs both to simulate sense loss and to teach them to create multi-sensory visits and workshops in which artworks can be enjoyed without making use of sight or hearing, sessions on haptic perception and on how to build an accessible artwork.

This practice is also very interesting due to the innovative tools created to enable the access to pictorial artworks, i.e. multi-material tactile translations. The creation process of these items starts with the analysis of the painting by art experts and experts in typhological subjects. They work together to identify the more important details in a painting that can help a visually impaired person to perceive and understand the meaning of an artwork. Then the materials have to be chosen that are the closest to those depicted in terms of texture and colour, always considering the need to have a correct haptic perception of the materials. Assembling the materials is the most difficult phase: they have to be shaped in a form that is as close as possible to the original for visually impaired visitors to understand the positions of the items or bodies in the painting. Such multi-material translations are very well appreciated not only by blind and partially sighted users, because this is a...
very fulfilling tactile experience. They are very useful tools also for deafblind people, who can access art by touch only.

Image: Painting of Madonna and Child with St. Thomas and Sebastian by Matteo da Gualdo with its multimaterial tactile translation.

Image: The painting "Christ standing in the sarcophagus" by Perugino
2. Another interesting aspect of this practice is that the project involved persons with disabilities in training activities as trainers, and in the creation of tools to access the artworks (audio-descriptions, Braille and large print guidebooks, sign language interpretation, etc.), improving skills that they can use when looking for a job.

Finally, another interesting aspect is the organisation of 1) awareness-raising events for the launch of the accessible routes in museums, for example, the “aperitif in the dark”, an event during which the museum rooms were obscured and visitors had the opportunity to touch the multi-material translation of artworks or 2) an experimental activity, i.e. the "sonification" of artworks, which was carried out in three museums and was very appreciated by the public. Different groups of musicians were asked to compose and play a piece of music making the audience perceive the sensations that a specific
artwork emanates. Deaf and deafblind visitors could participate in this experience by perceiving the vibrations produced by instruments.

d) Transferability to other contexts and countries, sustainability
We think that in many countries it is possible to work in cooperation with experts and representatives of persons with different disabilities to tackle accessibility from different perspectives. The wider the network is, the more inclusive the implemented actions can be: thanks to the project consortium the measures adopted benefitted not only visually impaired persons but also deaf persons, elderly people with cognitive disabilities and the general public. This project is financed by a foundation under a call for the fight against marginalisation, and we assume that many countries have similar calls and/or foundations funding this kind of projects. As a future, sustainable development, we notice that museums are now asking the project partners to produce new tools, because they discovered that not only do such tools promote the inclusion of persons with disabilities but they also increase the number of visitors who appreciate this new way of enjoying art.

Contact

MUSAE project
https://www.musae.it/

UICI - the Italian Union of the Blind and Partially Sighted, Italy
International Relations Office inter@uiciechi.it
Anteros and Tolomeo Museums

Specific measures in terms of accessibility
For 20 years, the “Francesco Cavazza” Institute of the Blind in Bologna has been developing two inclusive exhibition spaces inside its building, the Anteros Tactile Museum and the Tolomeo Museum. In these spaces also workshops for blind, partially sighted and sighted persons (school children, families, adult individuals and professionals) are held.

The workshops concentrate on cultural and educational activities, for example, tactile exploration of three-dimensional bas-reliefs translating pictorial works, clay modeling, tactile-book making, construction of aids and games, multisensory enhancement, etc.

Both museums provide training for museum operators and school teachers at all educational levels, university students, librarians and tourist operators specialised in the cultural field.

Short description of the two museum spaces
The Anteros Tactile Museum displays a collection of three-dimensional bas-relief translations of famous paintings from the Middle Ages to the Modern Age, with particular attention to Renaissance painting.

The objective of this museum is to teach the integrated use of residual senses in persons with a visual impairment to enhance their perceptive, cognitive and intellectual faculties, but also to teach persons without disabilities how to use all their senses to perceive art.

Image: Professional sculptor making a 3D translation of the "Primavera" painting by Botticelli
The Tolomeo Museum consists of several rooms:

- the Wunderkammer, where the objects and stories that have accompanied the development of the “Francesco Cavazza” Institute and the people who have lived there over the years are collected and illustrated in a captivating, vivid, emotional manner. There are technological and non-technological aids, as well as materials that describe how persons with visual disabilities progressively achieved their independence and could participate autonomously in the life of the city.
- the Atelier is the place where workshops for school children, families, groups and individuals of different ages and abilities are planned and held. This is the place where visually impaired persons make experiences in full autonomy and this helps them to measure and increase their skills in relation to other people.

Image: Tactile exploration of the “Nativity” by Antonio Rossellino

Image: Atelier workshop activity: let’s make an inclusive book
- a multisensory room that can be arranged in different ways. It can be modified and adapted according to the needs of the visitor, in order to meet his/her specific needs in increasing sensory abilities and skills.

Outcome and impact of measures

Over the years, the two museums established important cooperation relationships with civic, national and international institutions. The museums are recognized as important institutions whose aim is not limited to illustrate specific cultural and scientific concepts and knowledge, but they are centres where schools and universities, as well as businesses, research institutes and the public administrations resort to get important educational input.

Involvement of blind and partially sighted people

Museums grow with their communities. The two museums were developed with people as their core value. In particular, blind and partially sighted people were involved in both the design and implementation phases, and they cooperate in the various activities carried out in the two museums, from training to the presentation and narration of the exhibited items.

What makes this practice so interesting

The different approaches to art and culture enjoyment and technology that meet and exchange in the “Francesco Cavazza” Institute and its exhibiting spaces Anteros and Tolomeo promote constant research benefiting from various supports: from a multisensory approach to new technologies. The Institute is the place where you understand that you have to revise what you think are the only ways communication and narration about human activities are held. Seeking new ways to approach art and culture leads to a continuous exchange and growth that is experienced during the workshops held in the two museums.

Transferability to other contexts and countries

The practice is certainly transferable to other contexts and it was already. Some examples are:

- In Japan there is a collection of bas-reliefs in Tokyo, at the NISE (National Institute of Special Education of Japan) in Yokosuka and the
University of Yamanashi, as a result of the collaboration and advice provided by the Anteros museum. At NISE, important research was carried out with the items produced in cooperation with the Anteros Museum aimed at studying the cognitive and maieutic function of tactile guided exploration combined with the description of the painting.

Image: Guided tactile exploration of the translation of the "Nascita di Venere" painting by Botticelli. The visitor has sensors on the fingers to collect data for research

- The Tolomeo Museum with its Atelier visited Matera in 2019 – the year when this city was European Capital of Culture. Various workshops were held in other museums reproducing the Tolomeo museum workshop operating mode. In the near future, workshop activities will be held in the Schusev State Museum of Architecture in Moscow, Russia.

Both museums these can be models for good practices to be replicated elsewhere.

**Sustainability**

The sustainability of the two exhibiting spaces is ensured by the commitment of the “Francesco Cavazza” Institute of the Blind and the participation in national and international calls for proposals.

**Contact**

Anteros Tactile Museum
[https://www.cavazza.it/drupal/it/museoanteros](https://www.cavazza.it/drupal/it/museoanteros)
Tolomeo Museum
https://www.cavazza.it/drupal/it/node/997
at "Francesco Cavazza" Institute of the Blind, Bologna, Italy

UICI - the Italian Union of the Blind and Partially Sighted, Italy
International Relations Office inter@uiciechi.it
Accessibility and tourist information Bologna

Certosa Monumental Cemetery
Museum of Industrial Heritage
Medieval Civic Museum

In 2018, the Municipality of the city of Bologna started a project to improve the accessibility of museums for people with motor, sensory and cognitive disabilities. The project is called "Accessibility and tourist information" and involves important stakeholders such as the network of Bologna museums “Istituzione Bologna Musei”, the Bologna Online Tourist Information Office “Bologna Welcome”, with the supervision of the Office of the Disability Manager and the scientific and professional support of the Gualandi Foundation for deaf people, the “Francesco Cavazza” Institute of the Blind and the Accaparlanate-Documentation Centre on Handicap Cooperative.

In the first phase of the project onsite visits were implemented to assess the level of accessibility, both to the physical environment and the art content, of city museums. The visits and assessment were implemented together with people with disabilities, according to the principle of participatory design whereby they should not be simple testers, but active participants in the needs analysis and subsequent design proposals.

The collected data were used to create a mapping of the accessibility features of the museums involved. This data was used to create information that can be found on museum websites and the Bologna Online Tourist Office portal. In particular, for each museum three fact sheets were prepared that can be found on their respective websites, indicating the conditions of accessibility of premises and collections, divided by type of disability (motor, hearing and visual). In particular, to date, inclusive routes have been designed in three "pilot" museums: Certosa Monumental Cemetery, Museum of Industrial Heritage, Medieval Civic Museum. In these museums, the project continued with the creation of specific aids and tools for each type of disability; in particular, tactile maps for orientation and mobility and maps to illustrate monuments were created for the visually impaired, along with historical-artistic descriptions of the art works in Braille and in large print; in each museum, some original works were selected for tactile exploration, to be completed by reading some specifically created descriptive texts. In the Museum of Industrial Heritage, new technologies (QR-codes, NFC tags) are available to access information through smartphones. Also in this museum, in addition to the use of new technologies, descriptive sheets and captions in Braille and large print, tactile and high colour contrast maps are provided. In addition, training courses were designed and implemented for museum staff, so that they are adequately prepared to approach and deal with persons with
disabilities and facilitate their approach to art, in all moments of the visit, including reception, the educational workshops area and communication.

Result and impact

The first result was the availability of information on the accessibility features of city museums, that is very useful to both residents and tourists; secondly, in the three pilot museums, making original works available for tactile exploration and the provision of information through specific tools raised the level of accessibility so that persons with visual disabilities can enjoy the art contents in the museums, lowering the risk of frustration. This was also achieved through the training of museum staff, enabling them to organise and run more inclusive workshops for both children and adults. Tactile maps in particular turned out to be used for educational activities with school children.

Measure selection and implementation

The implemented measures were chosen through a shared process:

- in a first phase among the institutions involved, namely the Municipality of the city of Bologna, Istituzione Bologna Musei and Bologna Welcome with the “Francesco Cavazza” Institute of the Blind, the Gualandi Foundation for deaf people and the Accaparlante-Documentation Centre on Handicap Cooperative

- in the second phase, during the visits to museums, the accessibility assessment was carried out with the involvement of people with disabilities and included meetings with the directors and curators of the museums, to understand their needs and their perception of the problems concerning the access to cultural heritage by people with disabilities.

Involvement of blind and partially sighted people

The involvement of blind and partially sighted people was required not only to assess museum accessibility in phase one and test the designed museum itineraries for visually impaired visitors in phase two, but also to understand their needs and expectations about what they would like to find inside each museum in terms of services and accessibility. Involvement is essential to achieve a result shared and participated by the recipients of the project. In addition, all the tools designed were submitted to blind and partially sighted people to assess their usability and effectiveness before final implementation.
What makes this practice so interesting

In our opinion, one of the main values of this project is the active involvement of both museum staff, on the one hand, and blind and partially sighted people, on the other. This ensured that the development of the project was shared with people with disabilities, and that it was not done for them but with them. Moreover, an additional value was the collaboration among three institutions working with different disabilities (visual, hearing, motor) which made it possible to provide a shared response to needs that are often very different, but that should all be met equally.

Transferability to other contexts and countries

This practice is potentially transferable in every city and country, as this is an approach that successfully addresses the issues of museum accessibility by listening to all points of view, first of all those of people with disabilities, i.e. the users, but also those of the museum staff, which are themselves bearers of needs that should not be set aside; we believe that this working method could therefore be exported to other places.

Sustainability. How sustainability is assured

The sustainability of the practice has been ensured by the Municipality of Bologna, supported by the Department of Tourism and Trade of the Emilia-Romagna Region, that provides economic support to all phases of the project.
Image: Tactile map of the Medieval Civic Museum

Image: Tactile map of the Industrial Heritage
Contact
Certosa Monumental Cemetery
https://www.bolognaservizicimiteriali.it/la-certosa

Museum of Industrial Heritage
http://www.museibologna.it/patrimonioindustriale

Medieval Civic Museum
http://www.museibologna.it/arteantica/luoghi/62013/id/36155

UICI - the Italian Union of the Blind and Partially Sighted, Italy
International Relations Office  inter@uiciechi.it
Capitoline Museums

Introduction

The Capitoline Museums are a single museum grouping various art and archaeological collections and it is the main civic museum of Rome, consisting of works of art mainly illustrating subjects about Roman history and culture.

The Capitoline Museums offer guided tours where blind and partially sighted visitors can touch sculptures, miniature models of buildings and tactile translations of paintings and statues, assisted by specialized guides.

In addition, descriptive sheets have been created for the exhibited works, complimented by audio descriptions. The museum also organises workshops for schools, providing the opportunity to carry out inclusive and accessible activities for all children.

Visually impaired visitors can book guided tours through a dedicated phone number, both as individuals and in groups.

Accessibility measures

- Tours with operators specifically trained to meet the access needs of visually impaired visitors to works of art. During such tours, visitors are accompanied through planned itineraries, but they are also guided to explore specific works by means of tactile panels or scale models and are allowed to touch some of the original sculptures through very thin gloves.
Scale models of buildings as permanent tactile supports, such as the one of the Capitoline Square

Image: Scale model of the buildings in Capitoline Square

- Relief tactile panels to provide information: maps of each museum floor with visitor's route and the position of the most important works of art to be found there, translation/transduction of works of art on display in the museum.

Image: Maps of museum floor
- Faithful reproductions of objects
- Specific audio-descriptions for blind and partially sighted visitors
- Easy to navigate online information: from the homepage you enter the accessibility page, where there is an overview of what is offered to visitors with different disabilities (http://www.museicapitolini.org/it/it/informazioni_pratiche/accessibilita) . In the section dedicated to visually impaired people, you get information on the available support, the calendar of the tactile visits (suspended at the moment, one example is: http://www.museicapitolini.org/it/didattica/musei-da-toccare-amore-epsiche-una-favola-intramontabile-3) and you can read the itineraries for blind and partially sighted visitors by clicking on the images at the bottom.

**Results and impact**

The Capitoline Museums, in addition to being one of the most visited museums by the general public in Rome, receives more and more blind and partially sighted visitors, also from other cities and countries.

**Shared decisions and implementation process**

Various meetings were held among the representatives of the local office of the Italian Union of the Blind and Partially Sighted (UICI), the Museum Association, that is a non-for-profit association for the promotion of the accessibility to art for persons with disabilities, and the curators of the Capitoline Museums to pool together their expertise in order to provide museum staff with training for specialized art operators able to create fully accessible itineraries inside the museum for blind and partially sighted visitors.

The tactile books and panels have been designed pooling partners’ expertise on making all parts of the works conceptually perceptible, and this entailed not producing mere tactile reproductions, but translation/transductions of works, with a selection of highlighted details.
Routes and descriptive sheets have been created to support guided tactile tours. One example is the tactile tour providing insights into the history of Rome starting from the Iron Age. The museum offers faithful reproductions of ceramic and metal products that were part of the funeral equipment in the tombs of the ancient necropolis on the Esquilino Hill.
On the second floor of one of the two Museum buildings, there is a painting collection. There, tactile panels allow visitors to explore some of the most important exhibited paintings, i.e. three tactile panels help blind visitors to explore by touch masterpieces by Caravaggio and Rubens.
Involvement of blind and visually impaired people

Visually impaired people provided expert advice on the training of specialized personnel during the meetings with the curators of the Museum and during the testing of the reproductions of works of art, the audio-descriptions and workshops.

What makes this practice so interesting

This practice achieves the full cultural inclusion for blind and partially sighted visitors because it makes it possible to them to explore important works of art by touch, promoting the sensory, direct knowledge of the work of art itself. Innovative technology such as BICOM, NFC, QR-code is being implemented and it is very useful, although visitors do not always have the skills to use these tools.

Transferability to other contexts and countries

Training courses for museum staff on the most appropriate approach to people with visual impairments to make them explore models and art works in a museum are a transferable practice. As for the making of tactile and relief maps, it is possible to obtain them using 3D printers or other equipment.

Sustainability

Sustainability is assured by the increase in the number of visitors of the museum.

Final considerations

We believe that the Capitoline Museums provide a very good practice because the best access to art is provided by an integrated system of technological tools (relief panels, audiodescriptions, etc.) and human interaction with staff with art expertise who have been specifically trained so as to be able to provide blind and partially sighted visitors with the best art experience.

Contact

Capitoline Museums Rome, Italy
http://www.museicapitolini.org/

UICI - the Italian Union of the Blind and Partially Sighted, Italy
International Relations Office inter@uiiciechi.it
10. AND 3 MORE EXAMPLES

Brought in by EBU culture network members.

Feeling Van Gogh – The Netherlands

Van Gogh Museum Amsterdam
The Feeling Van Gogh programme consists of an interactive tour and workshop, which encourage the use of your senses. During the tour, specially trained tour guides talk about the permanent collection and the fascinating story of Vincent van Gogh. Next, you go to the studio for a workshop.

In this workshop you can feel Van Gogh’s brush strokes on the special one on one 3D colour reproduction of his painting Sunflowers. Van Gogh is well known for his thick and expressive brush strokes which are very prominent on the museum’s special 3D reproductions. You can also touch other objects like a model of The bedroom and painting material. You can smell the scent of wet grass after a thunderstorm and listen to Van Gogh’s own words as passages from his letters are read to you.

image: Model of the Bedroom.
A movable feature wall has been placed in the hall on the main floor with another one-on-one 3D colour reproduction of the Sunflowers painting, a description of it, a ceramic vase, the type that Van Gogh used in his painting, a sunflower scent box and a musical impression inspired on the art work. This permanent touch wall is also very popular amongst sighted visitors, who have the unique possibility to come really up close to the painting and to examine details and use their other senses as well. This feature wall has an awareness raising factor in that it showcases an example of how visitors with no or little vision can experience art and get a feel of Van Gogh and his work. Reactions from visually impaired participants in the Feeling Van Gogh activity, their sighted family or friends, are positive.

From the very first idea and throughout the project, a blind and partially sighted advisor were actively involved. As the programme developed and became more concrete, groups with both blind and low vision participants tested the programme at different stages.

**Contact**

Van Gogh Museum, Amsterdam  
vangoghopgevoel@vangoghmuseum.nl  
https://www.vangoghmuseum.nl/en/visit/whats-on/feeling-van-gogh
3D Model of historical building - Finland

Use of 3D models

Library of Tuusula is home to the 3D model of The Eastern orthodox church of Hyryla, Finland

As result of the remarkable research project on forgotten Russian garrison churches, a 3D model was created of The eastern orthodox church of Hyrylä

This originally Russian orthodox church was built in 1900 and demolished in 1958. Finland stayed under Russian rule until 1917. The church was situated in a garrison area some 30 kilometres north of Helsinki. The building was planned for 400 attendants at the service. The Hyrylä area consisted at the time of a population of about 600 Russian soldiers and 100 Russian civilians.

The research was carried out by Timo Lehtonen, who also published four books. Having a visual impairment himself, the scaled 3D model was designed to be handled comfortably by someone with sight loss. The miniature 3-D replica was produced in 2015. Its height to the utmost peak of the cross is 35 cm, the other measures being 30 cm x 18 cm. It was painted with colours resembling the original redbrick walls. The size of the replica was defined so that it would be easy for a blind person to touch it or to take it in their hands. Thus, it is easy to find out the different forms and parts as well as to realize their reciprocal relations to each other. At the same time, the replica is big enough for a partially sighted person to distinguish the Image: model of the building.

The miniature 3-D replica was produced in 2015. Its height to the utmost peak of the cross is 35 cm, the other measures being 30 cm x 18 cm. It was painted with colours resembling the original redbrick walls. The size of the replica was defined so that it would be easy for a blind person to touch it or to take it in their hands. Thus, it is easy to find out the different forms and parts as well as to realize their reciprocal relations to each other. At the same time, the replica is big enough for a partially sighted person to distinguish the details of the building.
Such replicas have a significant value for all people because with their aid we can rebuild items that have not existed for several decades or even centuries. But they can be reproduced only on the condition that there are adequate architectural drawings, photos or other pictures preserved. Fortunately, this was the case with this church.
The model was initially made for personal use, and later donated to the local public library of Tuusula, situated approximately 3 kilometres from the original site of the church.

**Contact**

Timo Lehtonen  
Phone: +358405203177  
Email: timo.v.lehtonen@gmail.com  
www.timontieto.simplesite.com
A pilot online art description project involving members from Sight Loss Council has led Royal Collection Trust to launch free monthly sessions, opening up masterpieces from the Royal Collection to blind and partially sighted people across the country and abroad.

Royal Collection Trust (RCT), the charity which manages the public opening of the Official Residences of The Queen and cares for the Royal Collection, hosts regular exhibitions to provide public access to the royal art collection. For every exhibition it hosts, RCT runs descriptive tours designed for blind and partially sighted people at The Queen’s Gallery, Buckingham Palace.

With the increased restrictions for people visiting, RCT trialled an online session with Sight Loss Council members. The Descriptive Zoom was so successful it will now be offering these sessions every month.

The new Descriptive Zoom sessions form part of the events programme for RCT’s new exhibition: Masterpieces from Buckingham Palace, which runs from 1 December 2020 to January 2022.

The sessions, free for blind and partially sighted people to attend, will take place on the first Tuesday of every month. A painting from the Collection, usually on display in one of The Queen’s official royal residencies, will be described. This will include masterpieces from Buckingham Palace, Windsor Castle and the Palace of Holyroodhouse. Sessions will last about an hour and interaction is encouraged. Spaces are limited.

Amy Stocker, Access Manager, Royal Collection Trust, said: “Covid was the stimulus that made us look at how we can still provide access to the Collection to blind and partially sighted people. We had never done these digitally before but the pilot was so successful, we decided to make this a monthly Descriptive Zoom event.

“Art experts from RCT will describe the paintings and bring these to life while its historians will provide a background to the artists. Attendees will be able to ask questions. We want it to be really interactive.

“Working with Sight Loss Council members helped us to hone down how the sessions should run. It was a real joy to work with them and it lifted me. I am really excited these will become a regular fixture in the RCT calendar. And
the beauty of the online sessions is that it is open for people who live further afield and who may find it difficult to come to London in person.”

About Royal Collection Trust

Royal Collection Trust, a department of the Royal Household, is responsible for the care of the Royal Collection and manages the public opening of the official residences of The Queen. Income generated from admissions and from associated commercial activities contributes directly to The Royal Collection Trust, a registered charity. The aims of The Trust are the care and conservation of the Royal Collection, and the promotion of access and enjoyment through exhibitions, publications, loans and educational programmes. Royal Collection Trust’s work is undertaken without public funding of any kind.

The Royal Collection is among the largest and most important art collections in the world, and one of the last great European royal collections to remain intact. It comprises almost all aspects of the fine and decorative arts and is spread among some 15 royal residences and former residences across the UK, most of which are regularly open to the public. The Royal Collection is held in trust by the Sovereign for her successors and the nation and is not owned by The Queen as a private individual.

Contact

Royal Collection Trust
Email: amy.stocker@rct.uk
Phone: +44 07860 612393
www.rct.uk