Title: Map's Voice. Maps with voice output for everyone.

Theme: 5. Products and leisure activities

Subtheme: 5.12 Visits and guided tours

Keywords: Accessible maps, voice output, access to information, QR code, web based, design for all, accessible tourism destination.

Type of presentation: Good practice

"Access to information is a basic right therefore, it is necessary to give the person the possibility of receiving the information properly so that he/she can make decisions autonomously" Jon Ibarra, CEO of Puntodis.

That is Map's Voice!

Puntodis, specialists in accessibility in communication, have developed a tool, which provides relevant and accessible information about routing and both, the inside and the surroundings of tourist attractions.

Map's Voice provides the information adapted to the particular needs of each user, either in written form or by voice output in numerous languages.

Map's Voice was designed to be an information tool based on the design for all approach wherefore it had to fulfill the following requirements:

- Have a suitable design for a quick and effective perception.
- Have special haptic properties so that blind people can get to know the environment.
- The possibility of receiving expanded information about touristic attractions, in the language required, by oneself and in real time.
- Use ICTs because they are available to most people due to smartphones.

Initially designed for people with visual impairment, Map's Voice was developed as a **web service** supplemented with a **tactile-visual map**.

The accessible maps provide:
- Colour contrast to highlight different elements.
- Different textures to identify areas and routes on the map.
- Suitable typography of the map legend.
- Embossed routes and Braille texts.
- A QR code to further information in visual and audio format.

On the other hand, the **web service** consists of the QR code included in the map that provides extending information, via menus, of the routes and tourist attractions.

It also makes it easier for the user to choose the language in which they want to read or listen to the information. Currently the Map's Voice service is available in 12 languages: American English, British English, Spanish, American Spanish, Basque, Catalan, French, German, Italian, Japanese, Chinese and Portuguese.

The QR code has a high-relief frame to improve its detection.

Using Map's Voice is very simple and intuitive. By scanning the QR on the map with the smartphone, the information can be read or heard through a voice-over.

The QR and map content are based on a previous selection of the most relevant information provided by the client. In addition to combining visual and audio format, it is also possible to adapt texts to facilitate the understanding for people with hearing or cognitive impairments. Consequently, a validation test with real users is performed in every project to prove its utility and usability.

The structure of the content depends on the map legend in order to be coherent.
For example, in a map of a city or museum every object of interest has its own number. So in the web platform these same numbers give you the extended information in visual and audio format.

It should be noted that once the QR code is downloaded to the device it will be saved to repeat the retrieval of the information at any time.

Map's Voice is already an actual tourism solution in the Spanish cities of Madrid, Bilbao, Benidorm, Getxo and Álava. And the user experience has confirmed its advantages in universal accessibility, receiving a positive feedback from senior tourists and people with different special needs.

The broad and flexible functioning also leads to new projects with companies and associations of different sectors.

In conclusion, Map's Voice makes it possible for everyone to have access to the information needed to live the tourist experience anywhere, simply by scanning a QR code supplemented if required with a tactile-visual map. And all of that in a great variety of languages.

The combination of various accessible formats, including visual and audio, enables the access to information in a more complete, autonomous and comfortable way.

Various Spanish cities and museums already use Map's Voice to provide touristic information in an accessible way to citizens, achieving positive results based on user experience.

We think that if we collaborate in making environments, products and services designed and applicable for everyone, we can increase the motivation of people to travel and experiences the satisfaction of their own travel adventures.

We at Puntodis execute new technologies and make sure that their content really reaches the user. All of this makes Map's Voice to an essential tool for smart an especially accessible travel destinations.