Transforming our World Through Design, Diversity and Education

Proceedings of Universal Design and Higher Education in Transformation Congress 2018

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Preface

"Céad Míle Fáilte"

"A Hundred Thousand Welcomes"

UDHEIT2018, at its heart is a collective celebration of "Good Design".

All our contributors, the users, designers, practitioners, educationalists, theorists and policy makers continue to demonstrate that good design enables and that each and every one of us is a designer.

The journey towards realising the UDHEIT2018 congress has been both an emotional and empowering journey bringing the two communities of higher education and universal design together. The themes and subject areas covered in these proceedings capture the wonderful diversity of our community of practitioners – building on a strong foundation in research, policy and practice. This publication marks a moment in time, with each contribution reflecting the shared values and beliefs, at the intersection of the fields of Higher Education and Universal Design. Harnessing this collective ambition is a potent resource with transformative potential.

The "whole systems" approach covering the macro (International/National), meso (Regional/Institutional) and micro (Coalface), the barriers and facilitators to full participation for all citizens will be discussed and debated at this international congress. Each of these elements is drawn from individual experiences, revealing a rich seam of transferable knowledge and skills that will empower a new generation of learners and designers.

The recent report by the OECD showing that people have become more pessimistic about their prospects of "social mobility" over the last two decades is a timely reminder of our need to view the required transformation from a "whole systems" perspective. The perceived risk of sliding down the social ladder is growing in nearly all OECD countries. Our focus must be on creating a more equitable and inclusive society where there is the prospect of social mobility, the alternative is bleak with the strong likelihood of further erosion of economic growth as well as a decrease in life satisfaction and wellbeing. According to the OECD this vista will have a further negative impact on social cohesion and democratic participation.

To support us in our journey, the United Nations Sustainable Development Goals advocates for equality, recognising that Universal Design is an important concept that should be incorporated in all person-centred policies. Moreover, the United Nations Convention on the rights of Persons with Disabilities (UNCRPD) clearly stipulates that the most effective way of delivering on the promise of an inclusive society is through a Universal Design approach.

The author of "The Fourth Industrial Revolution" – Klaus Schwab calls for leaders and citizens to "together shape a future that works for all by putting **people first**" empowering them and constantly reminding ourselves that all of these new technologies are first and foremost tools made by people for people. For this "Global Citizen" to live and thrive in an increasingly sophisticated technological world, education has a key role to play in requiring us all to take up our responsibilities now and into the future as active citizens in all facets of our lives whether we are customers, designers, creators, voters or decision makers. It is for all of us to work in partnership with disadvantaged communities and marginalised sectors of society going on a "learning journey together" producing more active, participating citizens which in turn creates a more equitable and fairer society and in doing so enabling us to halt the persistent cycle of reproducing societal inequalities.

The large number of paper and workshop submissions for our congress from across the globe is a testament to the current state of Universal Design – exemplars which illustrate "what to do" and "how to do it". The next phase of evolution in this field is to continue to articulate the "Why?" The Why question gets us to examine our beliefs and it is our beliefs that ultimately guide our behaviours and decisions. Therefore, what is now required is a transformational shift, which will move us beyond understanding Universal Design to experiencing and feeling it and make it central to our work. As David Rose (Director of CAST) said at our Universal Design conference in 2015 in Dublin, what is now needed is an "emotional response" as too many within our society have had negative experiences and feel disconnected from the mainstream. Universal Design and UDL (Universal Design for Learning) have expanded to look at exclusion from a social-emotional perspective (i.e., physical access is not enough; there must be belief that all students are able to learn, and all students must have access to learning). Our response now needs to be based on a creative and emotional response in how we design our environments, products and services.

Therefore, we humbly request and give you permission to leave your "Mask" behind and lead with your hearts and souls.

In all the social and public spaces, we inhabit including our Higher Education campuses, we meet individuals whose needs are as varied and complex as their personalities. In other words it is **"Normal to be Different"**. It has become clear that communities of siloed practices are limited and do not deliver for today's complex and diverse world. A vision shaped by the needs of the communities we serve can transform exclusive environments to inclusive, connected and engaged experiences for all. Universal Design provides us with a framework and an opportunity to re-imagine our policies, facilities, services and curriculum, guided by a collective wisdom that declares **"Diversity – Is the new normal"**.

But, finally this work is an unfinished symphony – it needs your creative and emotional energy to bring this message to new audiences.

To all our reviewers, organisers and editors, the driving force behind UD-HEIT2018, we hold the vision that together we can achieve more. Each paper, presentation and conversation builds towards that goal of good design in all aspects of what we do. Let these papers (and our companion papers on Arrow@DIT) guide and inspire you, as you continue your journey, taking up the mantle by demonstrating that the emotional, philosophical and theoretical underpinnings of universal design can be realized in practice.

> "As water takes whatever shape it is in, so free may you be about who you become" (A Blessing for Equilibrium by John O Donoghue)

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Tools to Upgrade Facilities for All: How to Improve Business Dealing with Tourism

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Abstract. Providing quality services to any traveller requires constant efforts to ensure that tourist destinations, products, and services are accessible to all people, regardless of their health condition, physical limitations, gender, origin, age. This entails a collaborative process among all the interested parties: administrators, tourist agencies, tour operators, and end users, who expressing their points of view can objectively contribute to reach shared and effective solutions. A single visit destination can involve many factors, including access to information: the project A Region for All, promoted by Promoturismo FVG in collaboration with CRAD FVG and the University of Trieste, focused on this issue. Promoturismo FVG is a semipublic destination management organization. Its mission is to develop the regional tourism system collaborating with all the active subjects to improve the promotion and to optimize the resources by concentrating the efforts. The organization pursues its objectives by planning and organizing the offer through specific tourism products. In 2016 a mapping process has been started to investigate the usability of the relevant services to tourists / visitors with special needs along the itinerary of eight tourist centers of the Friuli Venezia Giulia region. To date, more than 200 facilities (bars, restaurants, pharmacies, cash machines...) have been detected. The paper will present the development of the work conducted by TrIAL - Trieste Inclusion & Accessibility Lab at Department of Engineering and Architecture within the University of Trieste for the management of the mapping process. On the strength of the mapping experience developed during the previous project LabAc (Laboratory of Accessibility) for the Province of Trieste and the project Trieste for All for the Municipality of Trieste (from 2013 to 2016), the research group has adopted and set a series of digital tools, has identified specific indicators and has focused on an efficient return of data to Promoturismo FVG. The overall project is still ongoing: collected data have not yet been published by the organization. Overall monitoring and evaluation activities are still lacking and will be part of a future phase of research.

Keywords. Accessible tourism, accessibility, inclusion, design for all, participatory process

1. Introduction

Defining tourism presents significant difficulties because of the breadth and complexity of the object of the study, whose contours are not always well defined. According to the definition given by Favro Paris [1], tourism can be considered as the set of phenomenon and relationships that arise from the interaction of tourists, businesses, governments and

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local populations operating within a process of attracting and hosting tourists and visitors in areas other than their own. A collaborative process among all the interested parties is required for at least two reasons: the first concerns everyone's right to participate autonomously and independently in the society, the second is about an economical and strategic reason.

According to *European Network for Accessible Tourism (ENAT)* [2] one of the most important aspects is to ensure that tourist destinations, products and services are accessible to all people, regardless of their health condition, physical limitations, gender, origin, age. This implies that all the stakeholders have to participate in order to reach shared and effective solutions by expressing their points of view. From the perspective of the universal design approach we refer to accessible tourism adopting the definition given by Buhalis and Darcy [3]:

Accessible tourism is a form of tourism that involves collaborative processes between stakeholders that enables people with access requirements, including mobility, vision, hearing and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed tourism products, services and environments.

A thorough work developed by the *World Tourism Organisation (UNWTO)* [4] focused on different definitions of accessible tourism, showing how the concept is constantly evolving over the years. An agreed concise definition of accessible tourism is given by ENAT through the project website [5]: "accessible tourism can be considered as the set of services and facilities (such as physical environment, transportation, information, communication) which enable persons with special access needs, either permanent or temporary, to enjoy a holiday and leisure time with no particular barrier or problem".

Facilitating travel for people with special access needs is therefore not only a human right imperative and a social responsibility, but also an exceptional business opportunity. Yet, a change in mind-set and in the model of tourism services provision is needed in order to meet this major market demand. Accessible environments and services contribute to improve the quality of the tourism product, thus increasing the overall competitiveness of tourism destinations. Accessibility, therefore, must be an intrinsic part of any responsible and sustainable tourism policy and strategy, as stated by UNWTO [6].

Considering that "the overall accessibility of the tourism sector depends not just on the action of individual businesses but on the accessibility of the entire supply chain that makes up the visitor journey", as expressed by European Commission [7], the importance in the coordination between all the parties is evident. This requires that individual providers in the same sector as well as providers across sectors coordinate their action to ensure an accessible experience. However, recent studies conducted by European Commission [8] confirm that there is very little coordination and integration of accessible tourism service provision across the supply chain. Recognizing that tourism is the major economic activity in the European Union with wide-ranging impact on economic growth, employment and social development [9] the European Commission works on a number of initiatives to improve policies and actions concerning accessibility. One of the most important initiatives regards the availability of information on accessible service, which is also the focus of this research.

2. Information on Accessible Services

Tourists with disabilities require a much higher degree of information and preparation before travelling than tourists without specific access needs. Without information regarding accessible destinations, people with disabilities are unsure if their needs can be met and may therefore refrain from travelling. As a result, they become excluded from the social and psychological benefits that travelling can bring. Thus, access to information is a precondition to travel. Recent study conducted by European Commission [7] shows that lack of information on accessibility along the journey or at the destination is the most frequently given barrier encountered by tourists with special access needs. An interesting report published by European Commission [10] tried to direct the actions for the tourism industry. Good information on current accessibility allows disabled people to judge for themselves whether a facility is accessible to them. This provides immediate benefits for those disabled people who can access the facility or destination in its current state, as well as increasing the market potential for the tourism sector. The report states that information on accessibility should be easy to obtain, preferably in a variety of formats. Where possible, information should be incorporated into general tourist information; if separate guides or brochure are produced these should be updated annually, well advertised and preferably free of charge.

Nowadays printed information are still important, but living in the era of WEB 2.0, we need to consider the importance in exploiting potential of web, which is becoming the place where motivation is created. The use of the internet remains essential for tourists: statistics collected by UNWTO [11] show that 80% of potential tourists use the internet in the planning phase, and these numbers are in constant annual growth. However, the web could also be critical: when surfing on web, potential tourists can choose their destination according to what is online. If a facility is absent on the web, it is almost certainly not intercepted by the tourist; if a facility is present on web but has outdated information, it is almost certain that could become an harmful issue. Hence, tourism industry has to adapt and uplift its practices and skills to meet changing customer behaviour, considering that we are living an era in which technology will serve the needs of travellers, companies and destinations, as mentioned by Cassa Depositi e Prestiti [12].

2.1. Responsibility to provide reliable information

Good and reliable communication is therefore essential to improving global accessibility, which according to several sources [13] [2] is the quality of an environment (natural, urbanised, built, technological or virtual), which allows its social or individual use on an equal basis, safely and independently by everyone, regardless their potential weaknesses in their sensory, intellectual functions or in their corporal structures.

People make their decisions on the information they receive, based on factors which they consider to be important. Their expectations are shaped by these information and they prepare themselves for travel accordingly. Who is responsible for providing reliable and up-to-date information regarding the accessibility of a tourism destination? The tourism sector is characterized by different types of enterprises:

- primary hospitality services (i.e. hotel and agritourism accommodation, hostels, room rentals);
- additional services (i.e. restaurants, museums, parks, shows, entertainment);

complementary services (i.e. airlines, railways);

tour operator and travel agencies (tourism enterprises whose purpose is to design, market, sell and organise tourism products).

As specified above, all of them should be responsible for providing information. But only the last category may have the interest and opportunity to collect all the information becoming a reference. Destination management organisations should bring together businesses and NGOs of people with disabilities, older people, other citizens' groups and the voluntary sector to develop tourism products through "hands-on" experience, meeting the needs of a diverse range of customers.

This is what happened in Friuli Venezia Giulia, an Autonomous Region in the North-East of Italy, which delegated the management of tourism to Promoturismo FVG. Promoturismo FVG, formed in 2015 by the merger of two agencies, is a destination management organization and its mission is to develop the regional tourism system collaborating with all the active subjects, give consistency to the promotion and increase the resources by concentrating the efforts. Facing a latent question reported by CRAD FVG, the aim of Promoturismo FVG was to investigate the accessibility of the facilities along several tourist itineraries proposed on its website and through the Infopoints distributed on the territory, in order to update the information.

3. Method

In 2012 Turismo FVG had the idea of mapping the regional territory to investigate the usability of the facilities. Three years later and after the merger with another agency, Promoturismo FVG signed an agreement with CRAD FVG launching the project *A Region for All*. The aim of the project was to offer universally accessible experiences verified and experienced by people with different disabilities and specific needs. A working table has been adopted in order to manage and follow the actions. The following organizations are part of the table: Promoturismo FVG as the project promoter; the associations inside CRAD as representatives of people with disabilities; Regional Information Centre on Environmental Welfare (Criba FVG) in support of the activities; Department of Engineering and Architecture at University of Trieste as scientific advisor for the management of data collection.

The first purpose was to define the methodology, the criteria to be adopted in mapping the structures, and the information to be provided. On the strength of the mapping experience developed during the previous project *LabAc* for the Province of Trieste and *Trieste for All* for the Municipality of Trieste, the University's research group proposed the adoption of a series of tools that has been tailored and used [14] [15].

3.1. Participants

The mapping process has been carried out in two different moments and modalities: quantitative data have been collected from experts belonging to the research group of the university, while qualitative data have been collected from representatives of the associations with several disabilities.

3.2. Procedure and Materials

The project, which is still ongoing, consists of six actions: A1. Identification of itineraries and facilities A2. Definition of methods and tools A3. Mapping of facilities A3.1 Collecting of quantitative data A3.2 Collecting of qualitative data A4. First data restitution A5. Data dissemination A6. Data updating

The process has been launched with the mapping of facilities on the eight prominent itineraries in the Region (A1) in the following cities: Aquileia, Cividale, Gorizia, Palmanova, Pordenone, Spilimbergo, Udine, Trieste (Figure 1). Once defined methods and tools (A2), university's research group worked on quantitative data collecting (A3.1) (period: December 2016) and first data restitution (A4) (period: March 2017). Qualitative data has been collected by associations with the support of Criba FVG (A3.2). Data dissemination and data updating (A5, A6) will be managed in the future by Promoturismo FVG.

All the mapping activities (measurements, forms compilation and photographs) has been taken by the surveyors with the prior consent of the owners who had been informed of the project through the presentation of a letter provided by CRAD FVG.



Figure 1. The eight cities where the facilities have been mapped in Friuli Venezia Giulia Region, Italy

3.3. Tools

As mentioned above, tools previously tested and developed in precedent projects (*LabAc*, *Trieste for All*) has been adopted. In this regard, it was agreed to customise digital survey factsheets for each category of structure, organised with a series of guided questions easily filled-in via smartphone. The digital survey factsheets have been organized with

Google Forms tool, a free adaptive and responsive data collection system [16]. An advantage provided by *Google Forms* is the possibility of obtaining *Google Sheets* containing all the data as final output [17]. This element should not be overlooked because it allows to optimize and simplify the information flows, especially for the data return phase.

The aim of the surveys was to detect the usability of touristic facilities in order to provide useful information to all visitors, and in particular those with special needs.

The facilities considered along the itineraries have been grouped by category (Table 1).

Every survey factsheet (Table 2) has been organized into 3 macro-sections, containing:

Section1 – the main information about the facility (name, address, category);

Section 2 – a set of questions to guide the collection of objective and quantitative data);

Section 3 – pictures.

A form has been completed for each surveyed facility.

Table 1. Fac	ilities mapped	along the	eight regional	cities itineraries	divided by categor	y
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	Categories of facilities					
CITIES	Α	В	С	D	Е	тот
Aquileia	4	2	3		2	11
Cividale	10	4	4	1	1	20
Gorizia	19	3	5	2	2	31
Palmanova	10	2	4	2	6	24
Pordenone	26	2	1	2	3	34
Spilimbergo	13		3	2	6	24
Udine	26	4	6		5	41
Trieste	21	1	2	3	3	30
TOTAL	129	18	28	12	28	215

Notes.

A) Bar and Restaurants (Bars, Cafes, Restaurants, Taverns, Pizzerias, Pubs, ...)

B) Sale of food (Pastries, Ice-cream, Sliced Pizza, ...)

C) Tobacco, Gifts, Infopoints

D) Pharmacies

E) Cash machines

Table 2. Factsheet

SECTION A: Main information	SECTION C: Pictures	
Name, Address, Category		
SECTION B: Objective and quantitative data		
REACHABILITY		link to folder
Designated parking spaces for clients	YES/NO	
Designated parking spaces for disables clients	YES/NO	
place		
distance from	measurements	
entrance		
itinerary		
notes		
By bus		
Nearby bus stop	YES/NO	
line		
distance from	moo muomonto	
entrance	measurements	
recommended		
notes		
1003		
ENTRANCE		link to folder
Main entrance		inin to joiner
steps	YES/NO	
	measurements	
ramps	YES/NO	
doormat	VES/NO	
doomat	description	
door	typology	
	width	
notas	description	
Secondary entrance *		
Presence	YES/NO	
INTERNAL SPACES		link to folder
Counter		
counter	height	
WC presence	VES/NO	
WC equipped	YES/NO	
transfer space	measurements	
	description	
washbasin	height	
Room/s		
spaces and furnishings accessible to people on wheelchairs	YES/NO	
	height	
, , , , , , , , , , , , , , , , , , ,	description	
menus for people with special	YES/NO	
notes		
Stairways and lifts		
Stairway	YES/NO	
easily identifiable	YES/NO	
Lift	YES/NO YES/NO	
easily identifiable	YES/NO	
presence of tactile indicators	YES/NO	
door	typology	
area of lift cabin	width	
braille pushbutton	YES/NO	
acustic signal	YES/NO	
EXTERNAL SPACES	VEGAIO	link to folder
spaces and furnishings accessible to people on wheelchairs	r ES/NO height	
	description	
notes		
		1. 1. C. 1.
ADDITIONAL FACILITIES		link to folder

4. Results

An amount of 215 facilities has been detected along the eight itineraries already promoted by Promoturismo FVG (Figure 1). In order to return the collected data in a user-friendly and efficient way, data has been processed to define some cases, summarized in 3 levels of *usability*¹ (*Usable, Usable with assistance, Usable with difficulties*) defined by colors (Table 3). The suitability of the dimensional characteristics has been considered regarding to the italian legislation on accessibility and overcoming of architectural barriers [18], guidelines and good practices collected, for example, from INU [19]. More specifically, it was decided to return information about two spatial characteristics: general usability of facilities and WCs (if present).

_	Usable	Usable with assistance	Usable with difficulties
Facility	>	>	>
WC	WC	WC	WC

Table 3. Level of usability of the facilities

Notes.

Usable means:

- facility has an entrance with suitable dimensional characteristics and can be used independently;

- facility has interior spaces with suitable dimensional characteristics and can be used independently;

- WC has suitable dimensional characteristics and can be used independently.

Usable with assistance means:

- facility has an entrance with partially suitable dimensional characteristics and can be used only with assistance;

- facility has interior spaces with partially suitable dimensional characteristics and can be used only with assistance;

- WC has partially suitable dimensional characteristics and can be used only with assistance.

Usable with difficulties means:

- facility has an entrance with unsuitable dimensional characteristics;

- facility has interior spaces with unsuitable dimensional characteristics;

- WC has unsuitable dimensional characteristics.

The choice of colours is explained as follows:

Green means: usable

Orange means: usable with assistance

Red means: usable with difficulties

4.1. Adverse events

The only difficulties concerned the closure of some facility during the mapping process.

5. Discussion

Data collection has been useful to understand the general state of usability of some facilities in the main regional cities. The survey activity has shown that there are often the conditions for improved usability, but not ever fully taken into account by operators. For example, in many cases the mapped WCs would have been checked as *Usable* because of their dimensional characteristics, but have been classified as *Usable with difficulties* because manoeuvring spaces (essential for people with reduced mobility) were occupied.

The operators have never obstructed the mapping activities, being almost always cooperative and interested in the work but showing in several cases a justifying attitude. In the majority of cases of *Usable with difficulty* facilities, the operators specified that being in the historical centre they were not obliged to make interventions to remove architectural barriers. This is true: Italian legislation imposes stringent restrictions on interventions in historic centres, proving a mainly conservative policy. At the same time, the accessibility requirement must always be respected. It is common to believe that there is no obligation to apply the regulation for the elimination of architectural barriers in historical contexts, because the interventions could be harmful to the characteristics of the protected asset [20]. Actually, the legislation prescribes that the problem can be solved at least with provisional and reversible structures [21], which has been the solution adopted in some structures. Considering the data obtained, it is believed that simple awareness-raising activities for operators could increase the level of usability.

5.1. Tool customization

As specified above, the digitalised system was preferred to the printed one in order to speed up all the phases: from the preparation of the materials, to the mapping process, and finally to the return of the data.

Digitisation was also chosen for another reason, linked to the so called "paperless office philosophy" mentioned by Richard Walker [22] which is also part of the objectives of the Digital Agenda for Europe drafted by European Commission [23].

5.2. Data restitution and data dissemination

Considering the purpose of the project, namely to communicate a lot of technical information to non-technical users in a correct and reliable way, the working group paid particular attention to how to disseminate them in a clear and effective way. Once the main communication channels of Promotourismo have been analysed, it has been decided to adopt two different dissemination strategies, with different levels of in-depth study:

Channel 1, website – digital information (further information sections, downloadable files);

Channel 2, infopoints located on territory – printed information (map).

Given the almost unlimited capacity of a website, it has been decided to allocate to in-depth sections the detailed sheets containing all the data collected, facility by facility, available for consultation and downloadable in pdf format. Given the limitations of a paper format, it has been decided to allocate to the map a limited amount of information as result of a summary of the data collected (three levels of usability, Table 3).

On the basis of these pre-conditions, the research group has returned and synthesized the collected data producing two different outputs for the two different communication channels:

Output 1 – report with all the detailed factsheets for each facility detected; Output 2 – report with summarized tables for each facility detected.

It is evident the importance of providing clear and highly readable information through the channels adopted, making it available to tourists with different needs. In recent years, some 'tourism for all' projects have produced guidelines to promote good communication from an inclusive perspective: we cite as a good practice a document drawn up by Regione Piemonte [24], which deals with the importance of communicating in a clear and detailed way. It is fundamental to provide:

clear, well described and usable facility characteristics;

reliable, upgraded, objective and complete information;

fair and non-discriminatory language and terminology;

comprehensible information and text descriptions;

different options in order to gaining a better understanding of the usability information (phone number, fax, address, e-mail)

- readability: big character, color contrast, space between words, logical structure of the text
- website accessible from all the devices in compliance with W3C standards WAI guidelines [25].

All the communication channels (catalogues, paper tools, brochure, flyers, websites, social network) should be considered, also evaluating different modalities to give information according to the channel chosen.

5.3. Critical aspects

Refer to the project, two main critical issues have come to light:

- data collected in 2016 still have to be published; this could be ascribed to two related causes:
 - 1. Promoturismo FVG has dissemination strategies with preset times and modalities;
 - 2. Promoturismo FVG activities and priorities are connected to regional politics and this couldn't guarantee project's continuity.

data collected in 2016 may no longer be valid today.

These critical aspects highlight some weaknesses to focus on, in order to improve the entire process:

time management: it is essential not to spend too much time between mapping and dissemination activities, in order to provide reliable information;

- data spreading: it is important not to spread outdated information, which could represent an evident problem;
- data updating: given the large amount of information to be managed, it is important to provide for its constant updating in coordination with all the partners involved.

5.4. Future developments

In accordance with the partners involved, it will be necessary to face both in progress and ex-post monitoring in order to verify user satisfaction and to collect any critical points that were not originally expected. Monitoring will also allow an actions optimization with a view to future developments, which may concern:

- the development and validation of the adopted tools, including their Open Access dissemination;
- the diffusion of indicators and criteria for the mapping process in order to ensure uniformity in the identification of usability levels especially in the case of several mappers;

an increase in the number of facilities to be mapped;

a greater involvement of the facilities staff, also through awareness raising initiatives.

In line with other territorially similar realities, for example "Catalunya: Turisme Accessible" [26], a further future action could concern the introduction of a permanent desk or working group that would allow:

constant monitoring of the facilities;

the dissemination of constantly updated information both through active channels and through new channels and new methods (for example, making greater use of social media through video campaigs);

a regional reference point to collect proposal and tourist offers 'for all'.

Endnotes

¹ The term *accessibility*, explicitly defined by the laws in force, refers to the observance of precise regulations so that spaces and facilities can be used independently and safely by people with disabilities.

The term *usability* refers to the actual possibility for people with disabilities to use an environment or equipment, even if not explicitly designed for this purpose. Therefore, even though a space or facility is *not accessible* by law, it can still be *usable* if it has dimensional, typological or accessibility characteristics, or is the object of management choices that allow its use by people with disabilities.

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