

## TOURISM FACILITIES ACCESSIBILITY IN CONTEXT OF SOCIAL TOURISM SUPPORT: EVIDENCE FROM THE CZECH REPUBLIC

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**Abstract:** Accessible tourism is one of the important discussed topics. It is a part of social tourism and it means equality for all tourism visitors. A town of Carlsbad as a famous spa destination should also be oriented on accessible tourism. That means to offer services also for disabled people or people with special needs. The article focuses on accessible tourism services in the town of Carlsbad in the context of access to cultural and natural heritage. It also deals with accommodation and catering facilities. The primary survey was conducted in 2017 and 2018. We used the methods of scientific work; and, i.e., the analysis method, a generalization method, mathematical, and statistical methods. Based on research results, we have to state that 15% accessible accommodation facilities in the town of Carlsbad with at least one available room. Almost one-quarter of catering facilities (23%) is accessible.

**Keywords:** Accessibility. Disability. Social Tourism. Travel.

### 1 Introduction

Tourism is not only an economic phenomenon but also includes social, cultural, political, and environmental dimensions. Therefore, in addition to the visible economic effects of tourism, such as income and foreign exchange input, non-economic and invisible social and cultural aspects should be given importance (Pizam & Milman, 1986, In Polat, 2018).

Globally, it is estimated that there are over 1 billion persons with disabilities, as well as more than 2 billion people, such as spouses, children, and caregivers of persons with disabilities, representing almost a third of the world's population, are directly affected by disability. While this signifies a huge potential market for travel and tourism, it remains vastly under-served due to inaccessible travel and tourism facilities and services, as well as discriminatory policies and practices (UN).

Social tourism is a term used to describe a wide variety of holiday types, destinations, and target groups: social tourism initiatives can be commercial and non-commercial, governmental and private. They range from small charities organizing holidays for children from low-income backgrounds, over government plans improving accessibility in hotels, to private tour operators offering ecological holidays. What all of these initiatives have in common, is that they bring a moral dimension to tourism, and that their primary aim is to include people in tourism who would otherwise be excluded from it (Minnaert et al., 2009).

The evolutionary concept of social tourism describes how socially excluded groups will benefit from the opportunity to experience holidays through financial support (McCabe, 2009).

The International Social Tourism Organization defines social tourism as the connections and phenomena related to the participation of both the host population of the countries of destination and the holidaymakers, of disadvantaged layers of society or of those unable to participate in tourism. This participation is made possible or facilitated by a combination of policies, clear social measures, and the commitment of social players (OITS, 2015).

Social tourism is a high ideal in the face of discrimination and the challenge of integration (OITS, 2015).

The core value behind the social tourism concept is the idea that that 'having a break' from daily life (and problems) contributes to the social, mental, and physical wellbeing of all individuals and subsequently contributes to 'good' health (Diekmann et al., 2018).

In the context of people with physical disability traveling is a part of social tourism, a phenomenon called accessible tourism.

Accessible tourism enables all people to participate in and enjoy tourism experiences. More people have access needs, whether or not related to a physical condition. For example, older and less mobile people have access needs, which can become a considerable obstacle when traveling or touring. Thus, accessible tourism is the ongoing endeavor to ensure tourist destinations, products, and services are accessible to all people, regardless of their physical limitations, disabilities, or age. It includes publicly and privately owned tourist locations, facilities, and services (UN).

In the context of accessibility for people with physical disabilities, it is preferable to speak about accessible tourism for all. It is a form of tourism that involves a collaborative process among 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 (Linderová, 2015, In Linderová & Janeček, 2017).

Accessible tourism for all is not about creating separate services for disabled people. It aims at full integration, or rather the inclusion of people with special needs, in particular, disabled and aged people, in the tourism sector. Viewed from the perspective of accessible tourism for all, the tourism policy in the European Union can be said to unite accessibility targets that are part of the otherwise commerce-related aspects of the tourism policy and a disability policy that, based on the UN's Standard Rules, support goals and specific measures at various levels that are designed to enhance accessibility in connection with tourism policy (Leidner, 2008).

For people with disabilities, traveling can be a challenge, as finding the information on accessible services, checking luggage on a plane, booking a room to fulfill access needs, often prove to be difficult, costly and time-consuming (UN).

Challenges for persons with disabilities include (UN):

- untrained professional staff capable of informing and advising about accessibility issues,
- inaccessible booking services and related websites,
- lack of accessible airports and transfer facilities and services,
- unavailability of adapted and accessible hotel rooms, restaurants, shops, toilets, and public places,
- inaccessible streets and transport services,
- unavailable information on accessible facilities, services, equipment rentals, and tourist attractions.

Accessibility is a significant part of social tourism support. Darcy (1998, In Darcy & Buhalis, 2011) divides the term access into three dimensions: physical access, sensory access, and communication access. Darcy (1998) views these three dimensions as an inclusive marketing process, which allows tourism players to realize the potential of accessibility for the marketing of tourism products and services to the widest possible client base (Linderová & Janeček, 2019).

Usability and universal design are also related to the term access and accessibility. The design for all is defined as the design for human diversity, social inclusion, and equality (EIDD, 2004, In Mosca et al., 2019). The purpose is to provide the same experience of the space, even with various solutions, to different people, regardless of their abilities, disabilities, age, sex, and culture. The application of design for all concerns the involvement of a plurality of stakeholders (both experts and final users) from the beginning of the design process (Buti, 2018; In Mosca et al., 2019).

## 2 Materials and Methods

The aim of this paper is to map the possibilities for people with physical disabilities to participate in tourism in the town of Carlsbad.

Partial aims are also defined:

- to map culture and historic heritage sites and their accessibility for disabled visitors,
- to map barrier-free tourist routes and natural heritage,
- to map accessible accommodation facilities which follow legal regulations,
- to map restaurant & catering facilities accessible for wheelchair users.

The paper is based on primary and secondary data sources. Among the secondary sources we used mainly professional books and journal literature, international documents regarding social tourism and the relevant legislative regulations of the Czech Republic. Furthermore, we used specialized web portals providing information to people with disabilities, databases of tourist information centrum of Carlsbad, Czech Statistical Office, various hotel portals, websites of accommodation and catering facilities, information materials of the spa, etc.

Primary data were obtained from field research within the framework of which we verified barrier-free access found out with the help of secondary research. A large number of tourism establishments and attractions were personally visited. Information about some of the establishments was verified by telephone.

Collecting of primary data took place in 2017 through 2018. The methods of analysis (also Correspondence analysis - CA) and generalization were used. Using graphic tools of this CA, it is possible to describe an association of nominal or ordinal variables and to obtain a graphic representation of a relationship in multidimensional space – for the readers; it is easier to understand. The analysis provides further evidence that dependencies exist between variables.

CA is a multivariate statistical technique. It is conceptually similar to principal component analysis but applies to categorical rather than continuous data. In a similar manner to principal component analysis, it provides a means of displaying or summarizing a set of data in a two-dimensional graphical form (Zámková & Prokop, 2014). All data should be non-negative and on the same scale for CA to be applicable, and the method treats rows and columns equivalently. It is traditionally applied to contingency tables - CA decomposes the chi-squared statistic associated with this table into orthogonal factors. The distance among single points is defined as a chi-squared distance. The distance between  $i$ -th and  $i'$ -th row is given by the formula

$$D(i, i') = \sqrt{\sum_{j=1}^c \frac{(r_{ij} - r_{i'j})^2}{c_j}} \quad (1)$$

where  $r_{ij}$  are the elements of row profiles matrix  $R$  and weights  $c_j$  are corresponding to the elements of column loadings vector  $c'$ , which is equal to mean column profile (centroid) of column profiles in multidimensional space. The distance between columns  $j$  and  $j'$  is defined similarly, weights are corresponding to the elements of the row loadings vector  $r$  and sum over all rows. In correspondence analysis, we observe the relation among single categories of two categorical variables. Result of this analysis is the correspondence map introducing the axes of the reduced coordinates system, where single categories of both variables are displayed in graphic form. The aim of this analysis is to reduce the multidimensional space of row and column profiles and to save maximally original data information. Each row and column of correspondence table can be displayed in  $c$ -

dimensional ( $r$ -dimensional respectively) space with coordinates equal to values of corresponding profiles. The row and column coordinates on each axis are scaled to have inertias equal to the principal inertia along that axis: these are the principal row and column coordinates (Hebák et al., 2007).

Table 1: Criteria of accessibility

Criteria	Characteristics
Accessible (barrier-free)	<ul style="list-style-type: none"> <li>▪ accessible all building/park/monument or a majority of its space – minimum one barrier-free access</li> <li>▪ visit possible without booking</li> <li>▪ ramps (mobile or fixed, inside/outside); 3m long ramp with a slope max. 12,5%, 9m long ramp max. 8%</li> <li>▪ fixed ramp width at least 110 cm</li> <li>▪ door width at least 80 cm</li> <li>▪ threshold high max. 2 cm</li> <li>▪ accessible WC</li> <li>▪ elevator (100 cm x 125 cm)</li> <li>▪ smooth motion inside the building (slightly elevated threshold, no step or stairs, easy and reliable access to all floors of a building)</li> </ul>
Partially accessible	<ul style="list-style-type: none"> <li>▪ access – not more than one stair</li> <li>▪ accessible only part of the building/park/monument or some from other requirements are not fulfilled</li> <li>▪ ramps (mobile or fixed, inside/outside); 3 m long ramp with a slope max. 16,5%, 9 m long ramp max. 12,5%</li> <li>▪ fixed ramp width at least 110 cm</li> <li>▪ door width at least 70 cm</li> <li>▪ threshold high max. 7 cm</li> <li>▪ accessible WC is not the main criterium</li> <li>▪ elevator (100 cm x 110 cm)</li> <li>▪ platform lift (70 cm x 90 cm)</li> </ul>
Inaccessible	<ul style="list-style-type: none"> <li>▪ complicated and difficult access to the building, to all floors of a building</li> </ul>

Source: Processed by the Prague Organization of Wheelchair Users (<http://www.presbariery.cz>)

## 3 Results and Discussion

The town of Carlsbad is one of the most famous spa towns in the Czech Republic. It is a popular tourism destination and a center of Carlsbad region with more than 230 thousand visitors per year. Indications for a spa treatment in the town of Carlsbad are gastrointestinal diseases, metabolic disorders, and musculoskeletal diseases.

Figure 1: Map of the Czech Republic



Source: <http://www.kijkjeinmijnhuis.nl/>

### a) Natural healing springs

In the town of Carlsbad, there are situated 15 natural healing springs. Springs: Vřídlo, Mlýnský, Rusalka, Prince Václav the 1st, Prince Václav the 2nd, Libuše, Skalní, Svoboda, and Haďí have barrier-free access. Springs Zámecký upper, Sadový, and Štěpánka are partially accessible because of insufficient ramp

slope or stair. Springs Charles the 4th, Zámecký nether, and Tržní are inaccessible for wheelchair users due to stairs. Based on the ascertained data, it is possible to state about the accessibility of spa colonnades.

Table 2: Accessibility of spa colonnades

Colonnade	Springs	Accessibility
Mlýnská	Mlýnský, Rusalka, Prince Vaclav the 1 <sup>st</sup> and the 2 <sup>nd</sup> , Libuše, Skalní	Barrier-free
Sadová	Hadí Sadový	Barrier-free Partially accessible (1 step)
Tržní	Karel the 4 <sup>th</sup> , Zámecký nether, Tržní	Inaccessible (a lot of stairs)
Zámecká	Zámecký upper	Partially accessible
Vřídelní		Accessible
Pavilion of spring Svoboda	Svoboda	Accessible
Pavilion of Alois Klein	Štěpánka	Partially accessible (1 step)

Source: Own research

Also, forests are attractive for Carlsbad visitors. For wheelchair users is suitable scenic trail "U Lučních rybníků." The trail is situated in fallow deer reserve. Forest trail in reserve has adapted surface (gravel, asphalt, sand) available for wheelchairs.

The Golf & Spa Resort Cihelny and the Golf Resort Karlovy Vary are accessible and have barrier-free restaurants, toilets, etc.

Rolava is a relaxing area with sports facilities (grassy field, beach, natural aqua park, tennis, kids playground, etc.). Barrier-free entrance, toilets, and shower are available.

#### b) Cultural and historic heritage sites

To the cultural and historic sites in the town of Carlsbad belong churches, spa houses, and castle Douбі.

Churches are inaccessible for wheelchair users or accessible with assistance. The most famous church in the city (St. Mary Magdalena Church) is inaccessible because of 16 stairs.

In the town of Carlsbad, there are situated 6 historical spa houses – Praga, Purkyně, Chopin, Morava, Tosca, and Elisabeth spa. They serve as accommodation facilities with spa procedures. They are inaccessible with a lot of architectural barriers as the threshold, stairs, insufficient door width, etc. Because of their historical value, it is complicated to remove barriers.

The castle Douбі is a private object. A part of the castle is accessible as a museum, but it is inaccessible for wheelchair users. A lot of steps, threshold, no adapted doors, etc. are barriers for those visitors.

Table 3: Accessibility of cultural and historic heritage sites

Object	Accessibility
St. Mary Magdalena Church	Inaccessible (16 stairs)
St. Lucas Church	Inaccessible (13 stairs)
St. Ondřej Church	Partially accessible (1 step)
St. Peter & Paul Church (ev.)	Partially accessible (1 step)
St. Peter & Paul Church (ort.)	Partially accessible (3 stairs)
Spa houses	Inaccessible
Elisabeth spa	Accessible (barrier-free pool)
Castle Douбі	Inaccessible (stairs)

Source: Own research

Carlsbad region is well-known through Moser glass and herbal liqueur Becherovka. Museum of Jan Becher is situated in the town of Carlsbad. The object has few parts. Only square

Becherplatz is barrier-free. Museum of Moser glass is accessible by a ramp. Barrier-free parking and toilets are also available. Becher house is 103 years old building. After reconstruction in 2011 is the house accessible for wheelchair users. Interesting is gallery Supermarket WC, which is gallery oriented on "design for all." The object was rebuilt from public toilets.

Table 4: Accessibility of museums

Object	Accessibility
Jan Becher Museum	Partially accessible (Becherplatz, Charles the 4 <sup>th</sup> restaurant by elevator)
Moser Museum	Partially accessible (ramp, barrier-free WC and parking)
Becher House	Partially accessible (ramp, barrier-free WC)
Gallery Supermarket WC	Accessible

Source: Own research.

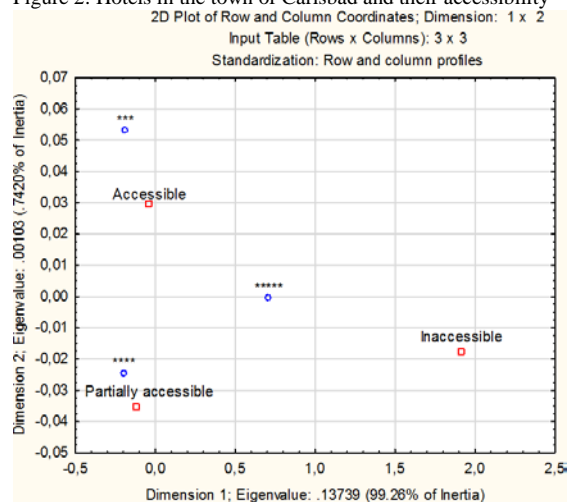
The International Film Festival in Carlsbad is the world-famous event and during this festival, there is available "Accessible cinema." The project started in the year 2000, for wheelchair users are available assistance services, information services, transport by barrier-free buses or cars, etc.

#### c) Accommodation facilities

Two hundred twelve accommodation facilities are situated in the town of Carlsbad according to the data of the tourist information office. Just 31 hotels and guest-houses of all accommodation facilities, (it represents 15% only), are accessible or partially accessible for immobile visitors. Linderová & Janeček (2017) state that the Carlsbad region offers 20% of accessible accommodation facilities.

Accessible accommodation should be as close as possible and on the ground floor where possible. A suitable telephone, alarm, or other means of calling for help must be available. A minimum transfer space for toilets, beds, and seating is 750 mm. The best practice is 950 mm or wider. Height of controls for door handles, switches, lifts should be within the minimum range of 900 mm to 1,400 mm from the floor. Best practice is 850 mm to < 1,200 mm. A minimum area of circulation space for all rooms, WCs, bathrooms is 1,200 mm x 1,200 mm (or diameter 1,200 mm). The best practice is 1,800 mm x 1,800 mm (or diameter 1,800 mm; Office for Official Publications of the European Communities, 2004).

Figure 2: Hotels in the town of Carlsbad and their accessibility



Source: Own research

Table 5: Accessible accommodation facilities

Name of hotel	Accessibility	Accessible room by the hotel website
Eurohotel	Accessible	No
Grandhotel Pupp	Accessible	Yes
Hotel Bristol	Partially accessible (6 buildings, no connections for wheelchair users)	No
Hotel Čajkovskij	Partially accessible (no connection between room and restaurant)	No
Hotel Dvorana	Accessible	Yes
Hotel Hubertus	Accessible	No
Hotel Imperial	Partially accessible (bath with handles)	No
Hotel Iris	Accessible (1 room)	No
Hotel Jean de Carro	Partially accessible (little space in a room, threshold to restaurant)	No
Hotel Kolonáda	Accessible	No
Hotel Kriváň	Accessible	No
Hotel Malta	Partially accessible (restaurant 200 m far)	No
Hotel Quisisana Palace	Partially accessible (3 stairs)	No
Hotel Romania	PA (bath with handles)	No
Hotel Saint Petersburg	Partially accessible (2 stairs, insufficient elevator)	No
Hotel Savoy Westend	Accessible	Yes
Hotel Slovan	Accessible	No
Hotel Thermal	Accessible	Yes
Hotel Venus	Accessible	No
Interhotel Central	Partially accessible (manual front door)	No
Karlsbad Grande Madonna	Partially accessible (threshold in shower)	Yes
Luxury Spa Hotel Olympic Palace	Accessible	Yes
Parkhotel Richmond	Accessible	No
Retro Riverside hotel	Inaccessible	Yes
Spa Hotel Martel	Partially accessible	No
Pension Stable JK	Partially accessible	No
Pension U Karla	Partially accessible	No
Vienna House Dvořák	Accessible	Yes
Wellness & Spa Hotel Ambiente	Accessible	Yes
Hotel Mignon	Partially accessible (stair – entrance door, bath with handles)	Yes

Source: Own research.

#### d) Catering facilities

In catering facilities as well as in hotel restaurants, cafés, etc., it is essential to ensure comfortable passage between tables. A passing space width of 800 to 900 mm is recommended. It is necessary to take into account space to maneuver and turn the wheelchair around in a circle with a minimum diameter of 1500 mm. Dining furniture must be adjusted to the wheelchair so that it is big enough to let the wheelchair fit under. It shall be possible to fit the wheelchair armrests under the dining table.

The optimum height of a dining table is 720 to 750 mm. The minimum space at the table is 900 mm per person. The areas connecting the interior of a restaurant with a terrace or garden should not have a gradient of more than 10% (Linderová & Janeček, 2017).

In the town of Carlsbad, there are situated 103 catering facilities. By the city statistics, 55 of them are accessible. Actually, according to field research on 24 of all catering facilities fulfill criteria of barrier-free access for wheelchair users.

Table 6: Barrier-free catering facilities

Hotel restaurant	Café	Restaurant	Bistro/ fast food
13	1	9	1

Source: Own research.

## 4 Conclusions

Based on research results, it is possible to state 15% accessible accommodation facilities in the town of Carlsbad with at least one available room. Almost one-quarter of catering facilities (23%) is accessible.

Wheelchair users can also visit some cultural sights and museums. But the majority of them are not fully accessible. Some natural trails are barrier-free or partially accessible.

The town of Carlsbad offers a large number of historical buildings (spa houses, museums, and hotels). If barrier-free entry for wheelchair users to the building is not possible due to heritage conservation, it is appropriate to ensure at least access for people with reduced mobility and the ability to orientate themselves (Linderová & Janeček, 2017).

We can observe an improvement in the situation of accessible tourism services in comparison to the past.

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