



## ACCESSIBILITY MARKET AND STAKEHOLDER ANALYSIS

### One-Stop-Shop for Accessible Tourism in Europe (OSSATE)

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#### Abstract

This report presents an analysis of the terminology related to disability, accessibility and tourism. The demand and supply analysis covers an estimation of the market size for accessibility in Europe and worldwide, the identification of key stakeholders and the current supply of accessible products and services.

#### Keywords

Disability, Accessibility, Tourism, Information Communication Technologies (ICTs), Demand, Market Analysis, Market Size, Supply, Stakeholder analysis



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## **OSSATE Accessibility Market and Stakeholder Analysis 2005**

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## List of Terms

<b>Abbreviation</b>	<b>Definition</b>
DDA	Disability Discrimination Act
DMO	Destination Management Organisation
DMS	Destination Management System
ETC	European Travel Commission
EU	European Union
ICT	Information Communication Technology
LSHPD	Long-Standing Health Problem or Disability
LTO	Local Tourist Organisation
NAS	National Accessible Scheme
NTO	National Tourist Organisation
OSSATE	One-Stop-Shop for Accessible Tourism in Europe
RDA	Regional Development Agency
RTB	Regional Tourist Board
RTO	Regional Tourist Organisation
TAs	Travel Agencies
TOs	Tour Operators
UK	United Kingdom
WCAG	Web Content Accessibility Guidelines

# ***1. Executive Summary***

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This report aims to provide a comprehensive market and stakeholder analysis for the accessibility requiring market and assesses the potential of the marketplace. It brings together information on both tourism demand and supply and demonstrates its significance.

Two major models of disability exist: the medical and the social model. The medical model positions disability as being the 'problem' of the individual. In contrast, the social model stresses that disability should not be regarded as a deviance but as a normal aspect of life and it is the society that should build appropriate structures to cater for people's needs. A typology of impairments is identified including mobility, sensory and communication impairments to intellectual/ mental disorders as well as hidden impairments in the form of health problems. Ageing is identified as a key contributor to disabling conditions and with an ageing society the need for inclusive design is emphasised. Thus, the ageing population has, amongst other market segments, varying accessibility requirements that have to be addressed.

The report illustrates the needs for physical accessibility through the design and modifications of facilities. It also stresses that access to suitable and accurate information using the Internet, designed according to ICTs accessibility guidelines, is crucial for the accessibility requiring market. An analysis of the market size demonstrated the key variations of demand types for people with impairments and the elderly population. It showed that the general demand for accessibility in Europe alone exceeds 127 million people. This represents more than 27% of the European population. It has been estimated that 70% of them have both, the financial as well as the physical capabilities to travel. If their friends, relatives and carers are included, this figure raises substantially with estimated tourism revenues exceeding €80 billion. Worldwide the number for people with impairments accounts for 600 to 900 million citizens. In fact, this figure is even greater, taking into considerations that all citizens need some degree of accessibility for their general comfort and quality when travelling.

The stakeholder analysis demonstrates a wide range of potential players involved in the provision of accessible tourism products. These range from specialist operators that serve this market exclusively to mixed providers that offer both, mainstream as well as specialised tourism products, to purely mainstream providers that are not yet concerned with accessibility. An analysis of available information demonstrates that there is a very small percentage of the market that addresses the needs for accessible tourism. Even organisations that have inclusive design or have undertaken suitable modifications often fail to publicise this fact, failing to inform people with accessibility requirements and missing a huge market opportunity. The NGOs and other organisations that provide suitable information often address small parts of the market and rarely are able to provide a comprehensive one-stop-shop solution or to address the needs of people or facilities that are not in their local area. This demonstrates clearly the need for OSSATE as a value added mechanism.

## ***2. Introduction***

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People with accessibility requirements have the desire and the right to travel like everyone else. However their travel experiences are still highly restricted by physical accessibility barriers such as transportation constraints, inaccessible accommodation and tourism sites as well as information barriers such as a general lack of information or poorly designed web sites. According to Miller & Kirk (2002) tourists who have varying levels of accessibility requirements are too often poorly served by the tourism industry.

The reason why disabled people and generally all people with accessibility requirements are not served adequately by the travel and tourism industry is a combination of missing tourism product supply and inadequate or missing information. The lack of reliable information is regarded as one of the major causes that prevent disabled people and others with access requirements from going on holiday (Stumbo & Pegg, 2005).

So far the tourism industry has hardly recognised the potential and the value of barrier-free or inclusive tourism design. As long as the tourism industry will not realise that barrier-free tourism is an indicator for quality and competitive advantage, it does not attract the considerable market-share of the growing customer base comprised of disabled people, elderly people and all citizens demanding accessibility.

Before explaining the relationship between tourism and accessibility, chapter 3 outlines the theoretical framework for conceptualising disability. Within this chapter, an overview of the dominant models of disability is given, dimensions of disabilities are outlined and the major characteristics of each of these dimension is given.

Building up on these concepts, the report shows how tourism has engaged with the discourse on disability and accessibility. Hereby, the focus is placed on physical access to tourism sites and venues as well as on access to tourism information. The latter subject incorporates an explanation of the importance of Information Communication Technologies (ICTs) and eTourism in particular when dealing with the provision of tourism information. Within this context, the role of the OSSATE (One Stop Shop for Accessible Tourism in Europe) (OSSATE, 2006) project is explained, leading to the proposed research objectives of this report.

The approach adopted to answer the research questions, focuses on multi- disciplined methods to analyse the subject from various angles, in order to best satisfy the requirements of this specific research project.

The analysis of demand investigates the market size for accessibility worldwide with a particular emphasis on Europe. The most significant parameter for determining the market size is the share of the population in each country with access needs. Further, travel patterns of particular customers, that live with a disability, are explored in terms of travel spending, travel companions, etc. leading to an estimation of the market potential in terms of the benefits to be accrued for tourism suppliers by serving this market.

On the supply side an overview of key stakeholders involved in the provision of information on accessible products and services is given. A brief description of accessible tourism provision within the 25 European member states is therefore provided. An attempt is made to compare the total tourism supply in all sectors with the accessible tourism demand.



### 3. Towards Conceptualising Disability

Although determining whether a person has a disability appears to be straightforward, it is not. Definitions of disability often vary according to the purpose of the data collection or according to different classifications used (Eurostat, 2002).

According to activists in the disability movement, it is important to distinguish between 'impairment' and 'disability'. They claim that impairment refers to physical or cognitive limitations that an individual may have, such as the inability to walk or speak. In contrast, disability refers to socially imposed restrictions, that is, the system of social constraints that are imposed on those with impairments by the discriminatory practices of society (Burnett & Bender Baker, 2001).

Thus, the Union of the Physically Impaired Against Segregation (1975) defines impairment and disability in the following manner:

*"An impairment is lacking part of or all of a limb, or having a defective limb, organism or mechanism of the body"* (Union of the Physically Impaired Against Segregation, 1975).

*"Disability is the disadvantage or restriction of activity caused by contemporary organisation which takes no or little account of people who have physical impairments and thus excludes them from the mainstream of social activities"* (Union of the Physically Impaired Against Segregation, 1975).

This definition reflects the idea that to a large extent, disability is a social outcome. What distinguishes a socially "invisible" impairment such as the need for corrective eyeglasses from a less acceptable one such as the need for a corrective hearing aid, or the need for a walker? Functionally, there may be little difference. Socially, however, some impairments create greater disadvantage or social stigma for the individual, while others do not.

Thus, the concept of disability is also related to identity. Many citizens do not identify themselves as disabled. There are two main reasons for this. First, disability carries a stigma in some societies that many people try to avoid. They may fear that if they identify themselves as disabled, others will see them as wholly disabled and fail to recognise their remaining abilities. Secondly, imaging "the disabled" at one end of a spectrum and people who are extremely physically and mentally capable at the other, it becomes obvious that there is a tremendous amount of middle ground in this construct. Thus, people that are to be found in the middle ground, having various levels of accessibility requirements, often do not relate these access requirements to disability. These are for example people that have a broken leg and are temporarily impaired (Wendell, 1996).

As seen from the discussion above, conceptualising disability is not an easy but a very complex task. It is strongly interrelated with society, the problem of exclusion from social activities as well as how persons with accessibility needs perceive themselves. Over the last few decades, a variety of models for defining disability have emerged which are discussed in the next section.

The authors of this report are aware of the distinction between 'impairment' and 'disability', however for the sake of simplicity will use the term 'disability'/ 'people with disabilities' throughout the market and stakeholder analysis.

### 3.1 Models of Disability: Medical vs. Social Model

In general, disability policy scholars describe two main models of disability: the medical and the social model.

The medical approach to disability refers to disability as being the 'problem' of the individual. This approach focuses on dysfunction and assumes that it is both permanent and encompass every aspect of the individual life (Aitchison, 2003). It positions individuals with disabilities as less able than those who are non-disabled. In this view, the individual, who cannot be modified or changed by professional intervention, remains deficient (Gilson & Depoy, 2000). The individual with a disability is in the sick role under the medical model. When people are sick, they are excused from the normal obligations and are excluded from normal pleasures of society (Los Angeles Times, 1998).

There is no doubt that the medical model serves as the basis for many negative and limiting attitudes, policies and outcomes (Ells, 2001; Vash, 2001). Naturally therefore disabled people have been very critical of this model. While medical intervention can be required by the individual at times, it is simplistic to regard the medical system as the appropriate focus for disability related policy matters. Many impairments and chronic medical conditions cannot be cured. Instead of being seen as inseparable or purely defined by their illness, disease and impairments, the majority of disabled people want to acknowledge their state of health alongside any physical or mental conditions that may be present (Odette et al., 2003; Putnam et al., 2003).

Health is a multifaceted phenomenon, encompassing physical health, emotional well-being and social cohesion (Stokols, 2000). This alternative approach is often called the social model. It looks at human health from a broad perspective and challenges society and service providers to look not only at the indications of disease, illness and impairment, but also examines the individual's overall level of well-being and quality of life (Odette et al., 2003). Within this approach the focus is placed on providing necessary services in order to remove or minimise social and environmental barriers to full social, physical and leisure participation (Aitchison, 2003; Darcy, 1998a; Gilson & Depoy, 2000; Larkin et al., 2001; McKercher et al., 2003; National Institute on Disability and Rehabilitation Research, 2000 & Shaw & Coles, 2003). Therefore the problem of disability is revised and it is defined as inadequate support services to the particular needs of people with impairments when compared with the whole society. Attitudinal, architectural, sensory, cognitive, and economic barriers and the strong tendency for people to generalise about all persons with impairments overlooking the large variations within the disability community also play a major role within this model (Aitchison, 2003; Shelton & Tucker, 2005).

Consequently, the social model stresses, that disability should not be regarded as a deviance but as a normal aspect of life. It rejects the notion that persons with disabilities are in some inherent way "defective". In fact, most people will experience some form of disability, either permanent or temporary, over the course of their lives. Only a small percentage of persons with disabilities are born with their limitations. The remainder acquire their physical or mental impairments as a result of illness or accident, with the likelihood of disability increasing with age (van Horn, 2002). Given this reality, if disability was more commonly recognised and accepted in the way that society designs environments or systems, it would be regarded as normal. The cultural habit of regarding the condition of the person, not the built environment or the social organisation of activities, as the source of the problem, is the most prevailing issue within the discussion of the social model of disability.

Therefore, the overall aim of this model is to move the whole society to a more positive understanding of what it means to live with an impairment and to adapt the environment accordingly. Further, since disability is regarded as socially constructed then there has to be a social solution. This viewpoint is supported by a study investigating attitudes of European citizens with regard to disabilities. According to the Eurobarometer (2001), 97% of the Europeans state that something should be done to ensure better integration of people with disabilities into society.

For the purpose of this report, the definition of the social approach to disability is employed. It is therefore regarded as essential for the tourism industry to create and implement strategies which remove attitudinal, social, physical and informational barriers that currently prevent or reduce the travel options of persons living with a disability. Within these strategies, the diversity of the disabled population needs to be acknowledged and should cover all disabled people, irrespectively of the level of severity.

### 3.2 Dimensions of Disabilities

Many types of disabling conditions can arise from a variety of impairments ranging from those acquired at birth to those which arise as part of the ageing process, accidents or illnesses. The different types of disabling conditions usually come under a number of commonly used descriptive headings or terms. They range from mobility, sensory and communication impairments to intellectual impairments and mental health disorders as well as hidden impairments in forms of health problems. Further there are large variations within each type. Table 1 and the following section briefly describe the main categories.

**Table 1: Dimensions of disabilities**

Type of impairment	Description	Difficulties in one of more of the following areas:
<b>Mobility impairments</b>	Varying levels of physical mobility restrictions, affecting legs, feet, back, neck, arms or hands	<ul style="list-style-type: none"> <li>- physical and motor tasks</li> <li>- independent movements</li> <li>- performing basic life functions</li> </ul>
<b>Sensory impairments</b>	Capacity to see is limited or absent  Completely deaf or are hard of hearing	<ul style="list-style-type: none"> <li>- reduced performance in tasks requiring clear vision</li> <li>- difficulties with written communication</li> <li>- difficulties with understanding information presented visually</li> <li>- reduced performance in tasks requiring sharp hearing</li> <li>- difficulties with oral communication</li> <li>- difficulties in understanding auditorally-presented information</li> </ul>
<b>Communication impairments</b>	Limited, impaired, or delayed capacities to use expressive and/or receptive language	<ul style="list-style-type: none"> <li>- general speech capabilities, such as articulation</li> <li>- problems with conveying, understanding, or using spoken, written, or symbolic language</li> </ul>
<b>Intellectual/mental impairments</b>	Lifelong illnesses with multiple aetiologies that result in a behavioural disorder	<ul style="list-style-type: none"> <li>- slower rate of learning</li> <li>- disorganised patterns of learning</li> <li>- difficulties with adaptive behaviour</li> <li>- difficulties understanding abstract concepts</li> <li>- limited control of cognitive functioning</li> <li>- problems with sensory, motor and speech skills</li> <li>- restricted basic life functions</li> </ul>
<b>Hidden impairments</b>	Variety of illnesses	<ul style="list-style-type: none"> <li>- heart problems</li> <li>- blood pressure or circulation problems</li> <li>- breathing difficulties</li> <li>- problems with stomach, liver or kidneys</li> <li>- problems to control the level of sugar in the blood (diabetes)</li> <li>- disorder of the central nervous systems (epilepsy)</li> </ul>

Source: DEO, 2005

Mobility impairments refer to a wide range of physical mobility restrictions, e.g. reach, stretch, dexterity and locomotion. In this case, the physical capacity to move, coordinate actions, or perform physical activities can be significantly limited, impaired, or delayed. People with mobility impairments have difficulties in one or more of the following areas: physical and motor tasks, independent movements or performing basic life functions (DEO, 2005, Householder, 2001).

The category of sensory and communication impairments include vision, hearing as well as with speech impairments. When visually impaired, the capacity to see is limited or absent. Blindness or partially sight results in a reduced performance in tasks requiring clear vision, difficulties with written communication and/or difficulties with understanding information presented visually (American Foundation for the Blind, 2005; DEO, 2005).

The second subcategory of sensory impairments refers to people that are completely deaf or are hard of hearing. Hard of hearing is defined as having partial hearing capabilities in one or both ears and require the use of a hearing aid. Hearing impairments result in a reduced performance in tasks requiring sharp hearing, difficulties with oral communication and/or difficulties in understanding auditorally-presented information (Preston, 2002; DEO, 2005)

Communication or speech impairments refer to limited, impaired, or delayed capacities to use expressive and/or receptive language. Persons with speech impairments have difficulties in general speech capabilities, such as articulation. Further they might have problems with conveying, understanding, or using spoken, written, or symbolic language (DEO, 2005).

Intellectual/mental impairments are lifelong illnesses with multiple aetiologies (Pomona, 2004) and result in a behavioural disorder. These are apparent if the capacity of the nervous system is limited or permanently impaired or if the capacity for performing cognitive tasks, functions, or problem solving is significantly limited or impaired. Intellectual/ mental impairments are exhibited by a slower rate of learning, disorganised patterns of learning, difficulties with adaptive behaviour and/or difficulties understanding abstract concepts. Further, they can result in limited control of cognitive functioning, problems with sensory, motor and speech skills or restricted basic life functions (DEO, 2005).

The World Health Organisation (WHO, 1992) classifies 4 groups of intellectual disability, ranging from mild to profound intellectual disability. Within these 4 categories varying degrees of communication, sensory, motor and behavioural factors can be found. In addition, there is an increased level of care and supervision required, from mild to profound intellectual disability. People with intellectual disability have also a strong need for accessibility depending on the level of mobility to immobility.

Hidden impairments comprise a wide range of illnesses that are sometimes not obvious or not seen at all times but require special attention. These health problems might result in limited strength, vitality or alertness, attention deficit disorders or hyperactivity disorders among many others (DEO, 2005). Examples of hidden impairments are diabetes, epilepsy, heart problems, blood pressure or circulation problems, breathing difficulties and problems with stomach, liver or kidneys. People are either born with some of these illnesses or they develop over time. Further, some of the illnesses included in this category, such as Parkinson's or a stroke are the cause for mobility impairments.

The most recent international definitional framework by the International Classification of Functioning, Disability and Health (ICF) (member of the World Health Organisation) describes how people live with their health condition. It does not classify people but describes the situation of each individual within the spectrum of health and health related domains. The health and health-related status associated with all health conditions is therefore not only about people with disabilities but about all people. It has a universal application in order to identify components that either act as facilitators or hindrances for individuals in the physical, social or attitudinal world (ICF, 2001).

The framework used to describe the situations with regard to human functioning and its restrictions is divided into two major parts. The first one looks at body functions and structures, as well as activities and participation. Body functions are the physiological functions of body systems (including psychological functions) and body structures refer to anatomical parts of the body such as organs, limbs and their components. The component of activities and participation covers the wide-ranging list of domains related to aspects of functioning from both an individual as well as societal perspective. The second part of the framework takes environmental and personal components into consideration as they interact with the individual with a health conditions and determine the level and extend of the individual's functioning. All components in both parts can be expressed in positive and negative terms. Further, each component consists of various domains. In order to describe an individual's situation, the most appropriate category is selected and numeric codes are added to each category, thereby specifying the degree of functioning or disability or extend to which environmental factors act as facilitators or barriers (ICF, 2001).

Table 2 provides an overview of how the International Classification of Functioning, Disability and Health (ICF) organises health-related components in two parts.

**Table 2: The International Classification of Functioning, Disability & Health**

	<u>Part 1</u> : Functioning and Disability		<u>Part 2</u> : Contextual Factors	
<b>Components</b>	<b>Body Functions and Structures</b>	<b>Activities and Participation</b>	<b>Environmental Factors</b>	<b>Personal Factors</b>
<b>Domains</b>	Body functions Body structures	Life areas (tasks. Actions)	External influences on functioning and disability	Internal influences on functioning and disability
<b>Constructs</b>	Change in body functions (physiological)  Change in body functions (anatomical)	Capacity Executing tasks in a standard environment  Performance Executing tasks in a current environment	Facilitating or hindering impact of features of the physical, social and attitudinal world	Impact of attributes of the person
<b>Positive aspects</b>	Functional and structural integrity	Activities Participation	Facilitators	<i>Not applicable</i>
	Functioning			
<b>Negative aspects</b>	Impairment	Activity limitation	Barriers/ hindrances	<i>Not applicable</i>
	Disability			

Source: ICF, 2001

By looking at the model by the International Classification of Functioning, Disability and Health (2001), it becomes obvious that it attempts to achieve a synthesis to provide a coherent view of different perspectives of health from a biological, individual and social perspective. Thus, it provides a multi-perspective approach to the classification of functioning and disability as an interactive and evolutionary process. The individual's functioning in a specific domain is an interaction or complex relationship between the health condition and contextual factors (environmental and personal factors). Thus, it is important to collect data for all categories in order to investigate associations and causal links between them (ICF, 2001).

If health is to be described, all components are useful. For example someone may have performance problems and capacity limitations without evident impairments (e.g. reduced performance in daily activities associated with many diseases) or someone may have performance problems without impairments or capacity limitations (e.g. an ex-patient recovered from mental illness, facing stigmatisations or discrimination in interpersonal relations). On the other hand, someone might have capacity limitations without assistance and no performance problems in the current environment (e.g. an individual with mobility limitations may be provided by society with assistive technology to move around) (ICF, 2001).

Looking at the types of disabling conditions, it becomes obvious that disability is not a homogenous concept. It incorporates distinct as well as overlapping dimensions. However, common to all types is the demand for specific requirements that enables people with disabilities to fully participate in every-day life situations as well as in culture and leisure activities. A detailed statistical account for different types of impairments together with their subcategories is given in chapter 6 of this report.

### *3.2.1 Ageing and Disablement*

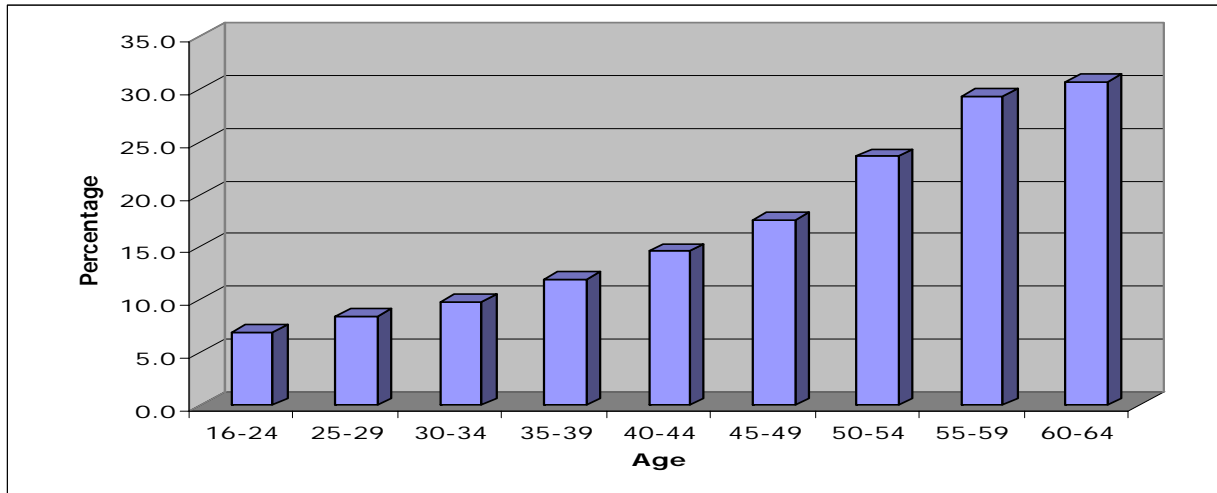
Currently the population in Europe is continuously ageing. There are 3 main factors driving population ageing. The first one is related to the ageing of the baby-boom generation of 1945 to 1965 reaching 65+ in 2010. Secondly, as fertility rates have decreased since 1965, proportionately the elderly population is growing at a faster rate than the younger generation. Thirdly, life expectancy at older ages is increasing (OECD, 2005).

Many authors and organisations have supported the view that there is a strong correlation between ageing and disability (Schmidt, 2004; Gerlin, 2005; Bloch, 2000; United Nations, 1990). As noted by the United Nations Disability Statistics Compendium (United Nations, 1990) there is strong and positive relation between ageing and disability globally.

Reduced function and participation in daily activities associated with impairment and disability increases substantially after the age of 40 for most of the population groups (United Nations, 1993; Eurostat, 2001).

Figure 1 shows the correlation between age and Long-Standing Health Problems or Disabilities (LSHPD) for 25 European countries and illustrates a strong increase of LSHPD with age. At present, 30.7% of the population aged 60-64 has a Long-Standing Health Problem or Disability in comparison to only 6.9% of the population aged 16-24 (Eurostat, 2003).

**Figure 1: Correlation between age and LSHPD in 25 European countries**



**25 European countries include** = Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Portugal, Austria, Finland, Sweden, United Kingdom, Czech Republic, Estonia, Cyprus, Lithuania, Hungary, Malta, Slovenia, Slovak Republic, Norway & Romania

Source: Eurostat, 2003

This tendency can be observed in all 25 countries under consideration, although the rate of progression differs from country to country. Finland, Estonia and the UK show the most rapid progression and reach the highest level of disability prevalence from the age of 50 onwards with more than 52% and 65% respectively of the population aged 60 to 64. Italy, Slovak Republic, Romania and Lithuania have the smallest percentage in each group (about 20% for the 60 to 64 years old) (Eurostat, 2003).

Statistics given by the Ministry of Health and Social Security in Germany revealed that only 2% of the severely impaired citizens in Germany are under the age of 18, whereas more than half of severely impaired people are 65 years or older (Schmidt, 2004).

According to Bloch (2000), a high percentage of the population aged 65 and over will not have a disability-free life expectancy. The disability-free life expectancy is calculated using the age related prevalence of self-reported disability and subdivides the years lived from the current mortality statistics into years with and without disability (Eurostat, 2002). In France for example in 1991, out of the total male population aged 65 and older (15.7% of the total population), only 10.1% remained disability-free. Looking at the female population aged 65 and older (20.1% of the total population) only 12.1% remained disability-free. The figures are even higher for the Netherlands where out of the male elderly population (14.4% of the total population) only 9.0% lived disability free aged 65 and over and out of the female elderly population which accounted for 19.0% of the total population in 1990, only a half lived without disabilities in the age group under investigation (Bloch, 2000).

By focusing on mobility impairments, Gerlin (2005) stated that Europe's elderly population who suffer age-related limits on mobility will increase from 16% of the population today to 21% in 2025. Given this increase in mobility impairments with age, elderly people will have the same constraints when entering buildings and restaurants and have the same restricted pathway options as disabled people.

The fact, that the abilities of older people deteriorate mean that they share many of the access barriers faced by people with disabilities. This demonstrates that any industry that addresses these issues can attract significantly more customers (European Disability Forum, 2001). It is therefore of tremendous importance to design inclusive services and products from an early stage in order to maximise the capacity for participation by the elderly population in daily activities, community life as well as for travel options.

Given this strong correlation between age and disablement and having examined that elderly people experience similar access barriers depending on the type of disablement or long-standing health problem, the elderly population represents an important customer segment for accessible products and services. An account of the current and future demand of accessibility by the elderly population is given within the statistical analysis of chapter 6.

### ***3.2.2 Disabled People and Able-Bodied***

In addition to people with impairments and the elderly population, it has to be taken into account that also able-bodied citizens have accessibility needs that have to be catered for. There is no clear line between those who are, and those who are not, labelled as 'disabled'. Ability (or level of disability) exists on a continuum where some people have exceptionally high ability, others have mid-range ability, and some have very low ability. Additionally, a person who might have low ability in one area (e.g. mobility) might have exceptionally high ability in another (e.g. intelligence or seeing). Often people who have temporary physical limitations do not see themselves as disabled and lack knowledge and expertise to cater for their own needs. Not only is there no clear line between those who do or do not have a disability or limitation, but almost everyone tends to lose ability as they age or at various times during the normal course of their life. Most people, at some point, break a bone and need to use crutches or some other aid, care for a young child or carry heavy and awkward suitcases. The "average" person often has "non-average" needs or limitations. In addition to supporting those who have permanent disabilities or limitations, inclusive/ universal design can make the transition to being older or having a temporary injury both easier and more affordable, while offering the option of living independently.

It is therefore essential to stress that it is the inherent right of all people to enhance their opportunities in life through equal or appropriate access to facilities. The principles of universal design are thus essential in the development process of tourism products and services that can be used and enjoyed by all people of all ages and abilities, assuring that everyone attains a similar quality of life. Striving towards universal designs means accommodating the full range of limitations as well as the able-bodied. Accessibility to all areas of the environment is fundamental to each person's quality of life and ability to fully participate as independent and active member of the community. Through the application of the principles of universal design, barriers can be removed from existing facilities and new barrier-free facilities can be constructed. Accessible features should be an expected part of every place, and should become an interwoven part of every facility, enhancing opportunities for the full range of users.

For improving and ensuring universal design for everyone, it is essential to reveal and refine the body of knowledge regarding actual requirements for the disabled as well as for the able-bodied population. Often minor adaptations can enable, facilitate and improve accessible features enormously. In line with currently ongoing research, it is argued that comprehensive standards have to be set. A prerequisite for the successful implementation of these standards is the education of the general public on the basic concepts and its positive impact on the utilisation of public facilities. The recognition, that most of the



features needed by people with impairments are also useful to others, clearly justifies making the inclusion of universal design common practice.

Universal design is a powerful concept with both strong ethical and financial justification. It requires an understanding and consideration of the broad range of human abilities throughout the lifespan. Creative application of that knowledge results in products and services that are usable by most people regardless of their level of ability or disability. By incorporating the characteristics necessary for people with physical limitations into the design of common products and building spaces, everyone will benefit from enhanced easiness and safety. This in turn will be more widely marketable and profitable.

### **3.3 Summary: Towards Conceptualising Disability**

Chapter 3 has given an overview of the difficulties for conceptualising disability. It further introduced the two dominant models to disability: the medical and the social model. By highlighting the major existing types of impairments, it becomes obvious that disability is not a homogenous concept and depending on the types of impairments, people have varying levels of accessibility requirements. The elderly population has been identified as an important group that shares many of the same access barriers than people with impairments. Further it has been emphasised that all citizens benefit from accessible design of facilities.

- Definitions and discourses of disability depend on the distinction between impairment and disability.
- The medical model reduces disability to impairment, thereby positioning the disability as being the 'problem' of the individual.
- The crucial separation of these the terms 'impairment' and 'disability' by the social model approach stressed the notion that disability is a social construct. Impairment refers to biological characteristics of the body and mind, these are physical or cognitive limitations that an individual may have. In contrast, disability refers to socially imposed restrictions, that is, the system of social constraints that are imposed on those with impairments by the discriminatory practices of society.
- This report adapts the social approach to disability as it is regarded as essential for the travel and tourism industry to create and implement strategies to remove attitudinal, social, physical and informational barriers that currently prevent or reduce travel options of disabled persons.
- Disabling conditions arise from a variety of impairments. The most commonly types range from mobility, sensory and communication impairments to intellectual impairments and mental health disorders as well as hidden impairments in forms of health problems.
- Given the strong and positive correlation between age and disability, it is acknowledged that the elderly population face similar access barriers than people with impairments, alongside the whole population that requires accessibility as a mean for general comfort and quality in life.
- For the OSSATE-project it is of tremendous importance to consider the diversity of all citizens having varying levels of accessibility requirements and strive towards universal design.

## ***4. Tourism and Accessibility***

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Ensuring access to travel and tourism opportunities for disabled people as well as for the whole population takes considerable knowledge, effort, commitment, and requires inclusive design that is essential for all citizens. Buildings have to provide easy access as a matter of course and not as an afterthought regardless of the type of impairment (Darcy, 1998b; Bennet, 2002). Although inclusive design aims to address all requirements, tourism facility developers need to appreciate different types and levels of accessibility requirements in order to address them accordingly. Central to creating such opportunities is also the necessity of agreeing to a widely accepted common way to describe accessibility within the tourism system. This includes a detailed and exact description of the terminology of the tourism system with an account of all tourism players involved in the system. Further, all accessibility components have to be identified and explained.

### **4.1 The Tourism System**

Generally, the tourism industry is a complex system of independent providers which aim to serve the consumer. A variety of stakeholders are involved which often have conflicting needs, wants and interests in the industry (Buhalis, 2003). The entire tourism system is defined by 5 elements: a traveller-generating region, a destination region, a transit region, a travel and tourism industry as well as the external environment (Leiper, 1995).

The traveller-generating region, also referred to as place of origin, embraces all customer target groups that travel for leisure, business or other purposes, such as health holidays or study trips. Whereas the traveller-generating region provides “push” factors to stimulate travel, the destination region creates the demand for tourism in “pulling” customers to individual places. Thus, the destination region is the place where tourism products and services are developed by primary suppliers and later experienced by customers. The transit region describes the period of time to reach a certain destination.

Within the travel and tourism industry, various businesses and organisations are involved in delivering tourism products and services. These are travel agencies, tour operators, Destination Management Organisations (DMOs), e-Mediaries, the transport industry as well as primary suppliers. Although not explicitly being a part of the travel and tourism industry, some disability organisations and charities also provide essential information with regard to accessible destinations and advice on how to travel with a disability.

The final element, the external environment, embraces all human, socio-cultural, economical, technological, physical, political and legal factors that have an impact on the tourism system as a whole.

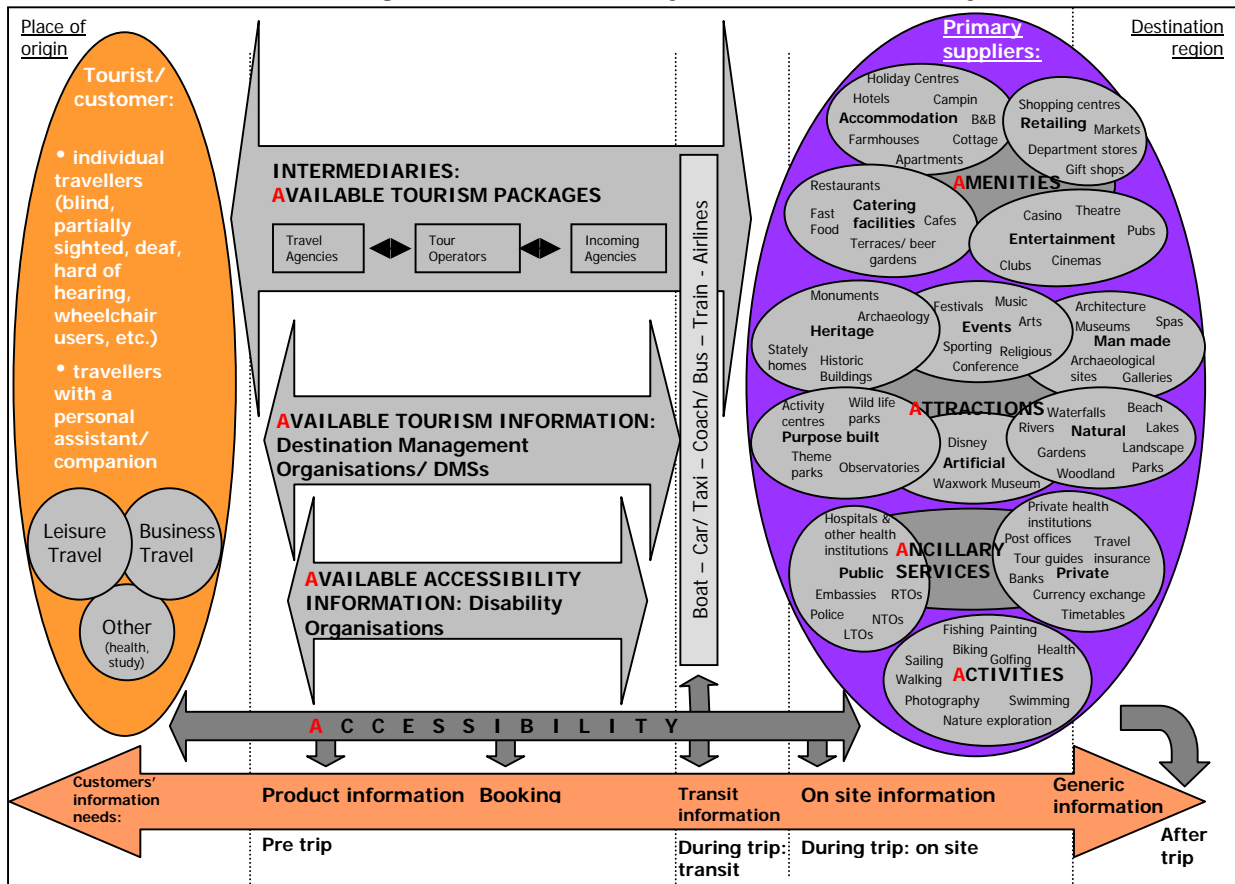
Figure 2 develops the framework of the tourism system developed by Leiper (1995) further by adding customers’ information needs. These are spread alongside the system, ranging from the pre-travel stage via the actual travel phase (transit and at the destination) to the after-trip period. Throughout all travel stages, customers have particular information needs that have to be fulfilled in order to deliver tourism products in an adequate way.

By focusing on tourism products and services, the expanded framework also incorporates the 6 ‘A’s, which are regarded as essential for analysing tourism destinations. These are

amenities, attractions, ancillary services, activities, available tourism packages and accessibility (Buhalis, 2000).

These "As" represent the destination's amalgam within the destination region, including amenities (e.g. hotels, restaurants, etc.) attractions (e.g. museums), ancillary services (e.g. health care) and activities. Available tourism packages are offered by travel agencies, tour operators or other intermediaries and available tourism information are offered by everybody in the system but is also put together and promoted by DMOs. Some disability organisations also provide tourist information in terms of accessible sites and venues and are also incorporated into this model.

**Figure 2: The tourism system and accessibility**



Source: adapted and expanded from Leiper (1995) & Buhalis (2003)

It is critical to support people with accessibility needs for their entire trip. What is needed is the creation of accessible paths throughout the system because isolated accessible facilities do not add to the travel and tourism experience. The collection and dissemination of comprehensive information about the entire accessible sub-system is a very difficult and challenging task given the amount of tourist destinations and tourism suppliers in Europe.

## 4.2 The Focus on Accessibility

Given the objective of the OSSATE-project, stated as “creating a new trans-national e-service in Europe, which will allow disabled people and others with access needs and their families to find out about the accessibility of tourist destinations” (OSSATE, 2005, p.2; OSSATE, 2006), the focus is placed on one “A”, namely accessibility. Hereby it is important to stress that accessibility not only refers to the transport part of the system, but interacts with all components of the customers’ information-need chain, the transit and the destination. Figure 2 illustrates the interaction of accessibility with the physical access (transit and destination) and the access to information (customers’ information need chain) within the tourism system.

Therefore, accessibility is used to describe facilities or amenities to assist people with disabilities. Accessibility requirements vary depending on the types of disabling conditions and go well beyond the physical type alone. The National Disability Authority (2003) looks at the issue of accessibility in a broader perspective, stating that all citizens have physical and informational accessibility requirements. Thus, the degree of sensitivity, clarity, safety and convenience required in designing an accessible infrastructure from the perspective of disabled travellers will benefit everyone else.

### 4.2.1 *Physical Access*

When travelling, people with impairments and generally all people have special individual requirements in terms of the accessibility of transportation, accommodation, sights, restaurants, streets and communication infrastructure. A well designed accessible infrastructure is the basis for ensuring that tourism products cater for all market segments (Pühretmair, 2004).

The underlying prerequisite for an accessible infrastructure is that tourism facilities are either designed or modified in order to enable people with accessibility requirements to fully participate in physical access (Shelton & Tucker, 2005). As pointed out by Darcy (1998b) physical access is one of the most important supply-side issues in tourism. Buildings with easy access as well as with a range of disability-friendly products have to be provided in order to fulfil the criteria of a well-intentioned accessible design.

By focusing on physical access, Darcy (1998a) has characterised access from three main dimensions. The first dimension is related to physical access, which involves people with physical impairments using wheelchairs or walking aids. The accessibility provision for this dimension includes for example handrails, ramps, lifts and lowered counters. The second dimension comprises people with hearing or sight impairments and focuses on sensory access. Sensory access requirements include for example tactile markings, signs and labels, hearing augmentation systems and audio cues for lifts and lights. The last dimension concentrates on communication access which involves people that have difficulties with the written word, speech and language problems.

Some countries have introduced legislation designed to make it compulsory for tourism suppliers to create an environment that is accessible to disabled people. Three examples of national legislation are the UK (British Disability Discrimination Act), America (American Disability Act) and Australia (Commonwealth Disability Discrimination Act). These countries represent the strongest attempts in creating legal accessibility standards.

Upchurch and Seo (1996) reported that accessibility legislation has a two-fold effect on the travel and tourism industry. First, an enforcement of accessible facilities increases the economic gain for the industry from the purchasing power of disabled persons. Secondly, the lives of disabled and elderly people will be enriched as the result of an increased interdependence. The latter effect is regarded as the most important benefit since it refers to a fundamental civil right of all citizens (Darcy, 1998, Darcy & Daruwalla, 1999, Darcy & Harris, 2002, Turco et al., 1998, Upchurch and Seo, 1996). These legislative forces have led to an increased provision of accessible facilities for wheelchair users and a greater use of Braille in public spaces (Shelton & Tucker, 2005).

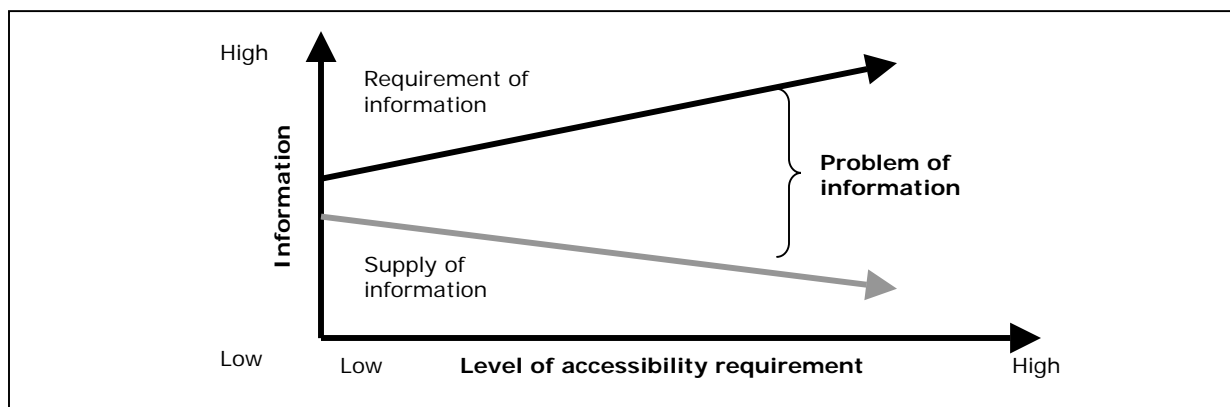
However, the physical support of accessibility to make tourism products and services available and attractive to people with physical and cognitive is not enough. Also important are attitudes and sensitivity of staff. The two most cited complaints about tourism and travel staff is the consistent distribution of unreliable accessibility information and the second was about negative, demeaning, or condescending staff attitudes (Burnett & Baker, 2001; Turco et al., 1998). Staff training is an appropriate way to ensure greater customer satisfaction as well as improved interaction with guests who are disabled (Stumbo & Pegg, 2005).

For a successful marketing of accessible facilities it is also important to communicate this information to all potential customers, since the strategic planning of travel and tourism related products and services, does not start at the destination. Thus, it is the provision of accessibility information that will influence the tourist decision making, travel planning and booking process (Pühretmair, 2004).

#### 4.2.2 Access to information

The travel planning of people with disabilities is normally characterised by a more detailed information enquiry than by people without disabilities. Disabled people search for information with respects to their individual special requirements. The higher their accessibility requirements are, the more detailed information these customers need. However in reality, the supply of specialised and detailed information tends to be smaller, the higher the level of accessibility requirement. Figure 3 illustrates the resulting problem of information. Thus, many disabled customers are unable to find and receive all relevant information. Often, the lack of availability of this information has led them to abandon the practice of taking holidays or seek alternative leisure solutions (Waschke, 2004). Consequently, the tourism industry and its products and services do not attract these customers and the market potential remains untapped (Pühretmair, 2004).

**Figure 3: Information problem regarding holiday taking of disabled customers**



Source: Waschke, 2004

According to Stumbo & Pegg (2005), the lack of comprehensive information provision regarding available and accessible travel and tourism opportunities is apparent in most countries. What is needed to open up travel opportunities for disabled persons is the dissemination of high quality, accurate, truthful and detailed information (Cavinato & Cuckovich, 1992). This information should not be restricted to specific regions or countries but should be given at the European and global level. It also should be available for the entire travel path.

Depending on the type of impairment, physical access barriers do not affect individuals in the same way, whereas, information needs are equally important to all of them. As a result, it is advocated that it is of tremendous importance to actively remove informational barriers that currently prevent or reduce travel options of persons with physical or cognitive restrictions.

However, access to information is critical not only for people with impairments. The possibility to receive information about accessibility features at the tourism destination is a key quality criterion that will influence all tourists' decision-making and booking process. It is therefore regarded as essential to create and design informational strategies with this in mind. Creative informational strategies should focus on criteria that are important to all people and should be developed by investigating and analysing information search characteristics of all market segments. For successful destination marketing, the presentation of accessibility information is vital to move towards barrier-free tourism for all. In many cases today, tourism providers fail to provide comprehensive information about their facilities and neglect to market accessible services. This results in a failure to attract a considerable market share of the population and to make the destination interesting for all tourists.

By considering the importance of the provision of information for all citizens, a fourth dimension has to be added to the previous 3 outlined in section 4.2.1, which refers to access to information. With the development of Information Communication Technologies (ICTs), web accessibility has become an important issue of the 21<sup>st</sup> century. Designing accessible web pages considers specific requirements for each type of impairment. The aim is to build sites that do not exclude people with mobility, visual, hearing or cognitive impairments in order to reach the widest audience possible. Examples for web accessibility include the provision of alternatives to auditory and visual content for visual or hearing impaired people. Further, a clear navigation mechanism is needed for intellectually impaired people. People with mobility impairments also often rely on assistive technologies to access and interact with the information on web sites (W3C, 1999). A fully accessible website benefits everyone in accessing and retrieving travel-related information.

By summarising the barriers related to physical access as well as to access to information it is important to stress that the tourism industry has to support all travellers at both stages: the travel planning (access to information and booking processes) as well as while travelling (physical access). These two stages are essential for the improvement of the quality of services as well as for complying with customers' needs (Pühretmair, 2004).

In order to establish a service for accessibility within the tourism industry that fulfils customers' needs, a number of prerequisites have to be met in order to achieve a successful outcome:

First, all parts that need to be accessible for customers in the tourism industry have to be identified. These are all components related to the provision of information before, during and after the trip (“customers’ information need chain”) and the physical environment which includes the transit region as well as the destination region (6 ‘A’s).

Secondly, the connections of these parts have to be considered. In order to enjoy a genuine holiday experience, it is not enough to provide accessible hotels, venues and sites but it is of equally importance to give detailed information about accessible pathways that connect amenities and attractions. This information is crucial for every destination to achieve the aim of barrier-free tourism.

By looking at these prerequisites, it becomes apparent that a subsystem of the entire tourism system needs to be created that is accessible. Although ideally everything needs to be accessible and follow the inclusive design principles, in reality only newly developed, purpose built facilities actually have the luxury of fully accessible design. Many established facilities have been designed at a time where building legislation did not include accessibility standards. Modifications are sometimes expensive, impractical or constrained by other legislation as in the case of listed and protected buildings or even impossible due to other constraints. In other cases, however, minor modifications can make a great difference and open up a facility to most types of demand.

The last prerequisite for establishing a service for accessibility is the awareness of the role that Information Communication Technologies (ICTs) play in tourism. This will be elaborated in greater detail in the following section.

### **4.3 Information Communication Technologies (ICTs) & eTourism**

Generally, Information Communication Technologies (ICTs) provide the tools and enable the evolution of tourism demand and supply by facilitating existing needs for the demand side and business prospects for tourism suppliers.

On the supply side, ICTs embody a wide range of opportunities and challenges for all players across the tourism value chain (Stamboulis & Skayannis, 1995). ICTs are essential for the marketing of tourism products and services and the distribution of information on a global scale. Effective use of ICTs also leads to increased competitiveness and prosperity of tourist enterprises by taking advantage of possibilities in terms of developing transactions with trusted partners and interacting directly with customers (Buhalis, 2003).

On the demand side, it has to be taken into account that the penetration of ICTs is largely consumer-driven as customers seek electronic interaction with the tourism industry. Timely and accurate information demanded by consumers via electronic channels is one of the key determinants of demand satisfaction since consumers search for tourism products and services in order to maximise the value of their time and money (Buhalis, 2003).

Both demand and supply side are heavily dependent on electronic market places empowered by technological advances. According to the European Travel Commission (ETC, 2004), the penetration of the internet and its use for information gathering and purchasing of tourism products and services will continue to increase and will prove to be of the utmost importance in the future. Thus, ICTs will dominate the promotion and consumption of tourism products and services in the future.

Statistics compiled by Internet World Stats (2005) show the internet usage in the EU in terms of internet penetration levels in 2005. Table 3 shows the internet penetration rates (percentage of the population using the internet) in 25 European member states.

The highest internet penetration rates can be found in the Scandinavian countries such as Sweden (73.6%), Denmark (68.7%) and Finland (62.1%) as well as in the Netherlands (66.2%). Looking at the percentages in absolute terms, Germany has the highest percentage of users in the European Union (21.5% of the total population of EU 25), followed by the UK with 16.3%. This represents more than 46 million and 35 million users respectively. Significant user growth rates, measured from 2000 to 2005, come from the new EU member states (Latvia 524.0%, Hungary 326.6%, Poland 278.6% and Czech Republic 253%) as well as Greece with 280.0%.

**Table 3: Internet usage in the European Union**

European Union	Population (2005 est.)	Internet Users, Latest Data	User Growth (2000-2005)	Penetration (% Population)	% Users in EU
Austria	8,163,782	4,630,000	120.5	56.7	2.1
Belgium	10,443,012	5,100,000	155.0	48.8	2.4
Cyprus	950,947	250,000	108.3	26.3	0.1
Czech Republic	10,230,271	3,530,000	253.0	34.5	1.6
Denmark	5,411,596	3,720,000	90.8	68.7	1.7
Estonia	1,344,840	621,000	69.4	46.2	0.3
Finland	5,246,920	3,260,000	69.2	62.1	1.5
France	60,293,927	24,848,009	192.3	41.2	11.5
Germany	82,726,188	46,312,662	93.0	56.0	21.5
Greece	11,212,468	3,800,000	280.0	33.9	1.8
Hungary	10,083,477	3,050,000	326.6	30.2	1.4
Ireland	4,027,303	2,060,000	162.8	51.2	1.0
Italy	58,608,565	28,610,000	116.7	48.8	13.3
Latvia	2,306,489	936,000	524.0	40.6	0.4
Lithuania	3,430,836	695,000	208.9	20.3	0.3
Luxembourg	455,581	170,000	70.0	37.3	0.1
Malta	384,594	120,000	200.0	31.2	0.1
Netherlands	16,316,019	10,806,328	177.1	66.2	5.0
Poland	38,133,891	10,600,000	278.6	27.8	4.9
Portugal	10,463,170	3,600,000	44.0	34.4	1.7
Slovakia	5,379,455	1,820,000	180.0	33.8	0.8
Slovenia	1,956,916	800,000	166.7	40.9	0.4
Spain	43,435,136	14,590,180	170.8	33.6	6.8
Sweden	9,043,990	6,656,716	64.4	73.6	3.1
UK	59,889,407	35,179,141	128.4	58.7	16.3
EU	459,938,780	215,765,036	131.6	46.9	100.0

Source: Internet World Stats, 2005

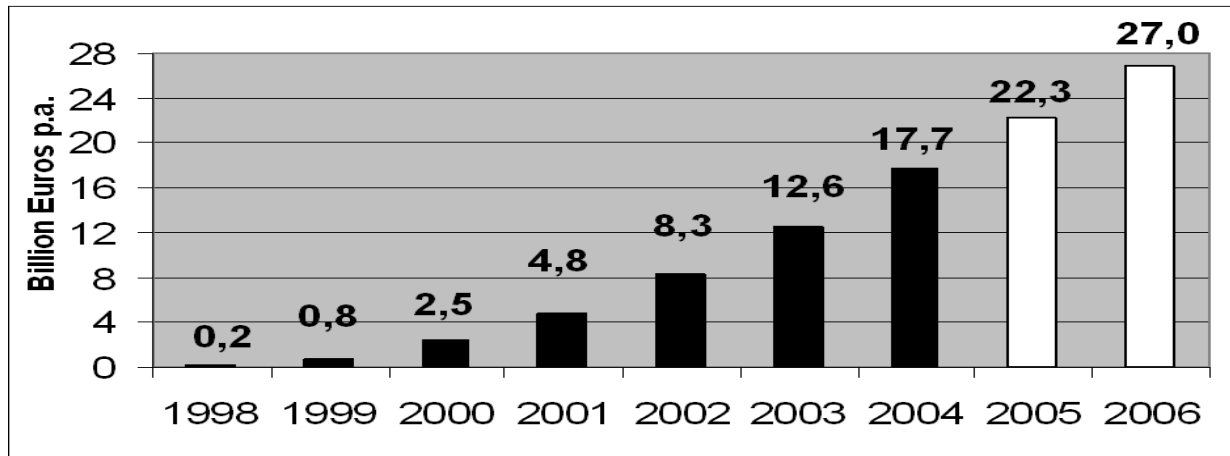
The growing internet penetration numbers that are noticeable in all European member countries indicate the importance of the internet in gathering all types of information. They also point towards a greater use of the internet for seeking travel related information, to plan and book holidays as well as for requesting help with travel needs. According to Alexa (2004), under the most demanded websites world-wide, a variety of travel-related sites, such as Expedia.com can be found.

According to the New Media Review (2005), 337 million trips were taken by Europeans in 2002. For almost a third (28%) of these trips the Internet was used, either for preparation (information seeking) or for booking the holiday. It is worth noting that the total volume of e-travellers was about 25% greater in 2002 than in 2001 (New Media Review, 2005).



Travel-related online sales increased generally by approximately 40% from 2003 to 2004 and reached EUR 17.7 billion in the European market in 2004. That is 7.4% of the market (up from EUR 12.6 billion or 5.3% in 2003). A further increase of about 26% during 2005 to about EUR 22.2 billion may be expected (9.1% of the market). The European online travel market could reach EUR 27.0 billion or 10.8% of the market by 2006. Figure 4 illustrates the current development as well as estimations for 2005 and 2006.

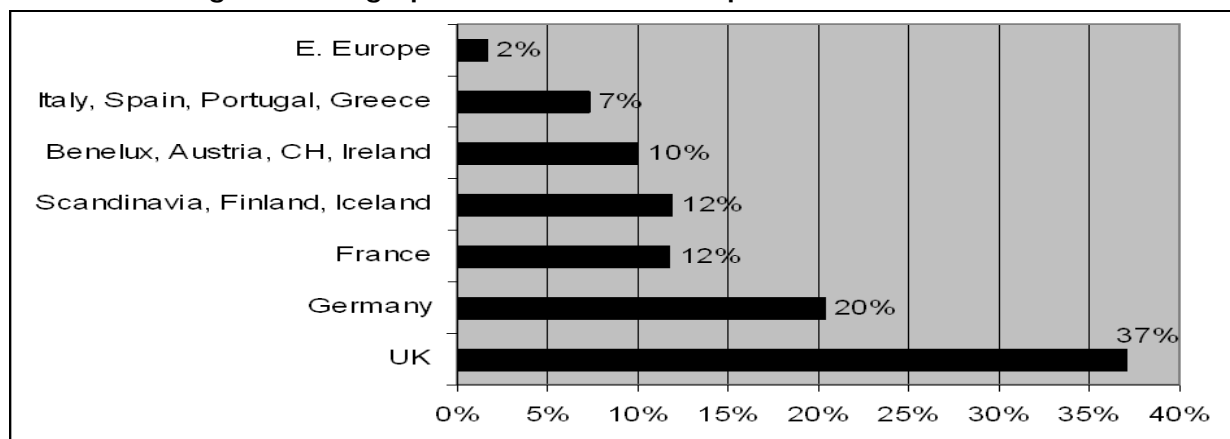
**Figure 4: Trends in the overall online travel market size in Europe**



Source: Marcussen, 2005

The UK accounted for 37% of the European online travel market in 2004 (EUR 17.7 billion), with Germany at the second place with 20%. The ten new European member states have been included in the European online travel market and contributed fewer than 2% to the total in 2004, after growing quickly during 2004. Figure 5 shows the geographical distribution for the European online travel market in 2004 with sales accounting for approximately 17.7 billion.

**Figure 5: Geographic status for the European online travel market 2004**



Source: Marcussen, 2005

In 2004 the breakdown of the market by type of service was as follows (with 2003 in brackets): Air travel: 57.9% (58.0%); Hotels 15.2% (16.4%); Package tours 16.0% (15.8%); Rail 9.0% (7.9%); Rental cars 2.0% (2.0%).

In addition to the general increase in using the internet for travel information and bookings, Reitsma, a member of the Forrester Consumer Data Research Group (2004)

found that a quarter of Europe's senior citizens are online regularly today. This represents more than 15 million Europeans aged 55 or older with Internet access. Forrester research found also that the number of online seniors in Europe has increased by 50% in the last 2½ years. The increase comes mainly from younger seniors, aged 55 to 64 and is likely to increase further in the coming years (ETC, 2005). This has important implications in particular for seniors demanding accessibility and searching for this information online.

Until now, no statistics exist that compile internet penetration rates for the disability market. However it can be assumed that the disability market is more dependent on the internet as it enables people with disabilities to access all relevant information immediately using only one single source. Therefore, the internet as an information medium offers enormous possibilities for people with disabilities as it opens access to information which is otherwise hard to obtain. In particular, tourism information systems and destination management systems are one of the most frequently accessed information sources on the internet (Pühretmair, 2004). E-tourism therefore grows dramatically and will be critical for both supply and demand, in the future.

Having shown how the tourism sector is interrelated with accessibility by focusing on physical access as well as access to information, the next section describes the role of OSSATE as outlined in the OSSATE contract (OSSATE, 2005) with regards to the key accessibility issues and other characteristics.

## **4.4 The Role of OSSATE**

The OSSATE-service will produce, as the acronym suggests, One-Stop Shop e-services for Accessible Tourism in Europe. The e-service aims to target all user groups requiring accessible venues and services. It will help travellers to identify accessible destinations including hotels, restaurants, museums, historical sites and entertainment etc. at the planning stage. All accessibility information will be provided using descriptive data to let users decide for themselves whether facilities and services are accessible to them, judging by their own physical capabilities, preferences and travel itineraries. Further, the OSSATE-service will indicate "accessibility paths" to deliver a full travel and tourism experience to its customers that will enable its users to expand their options and enjoy more competitive and quality tourist products and services. This comprehensive approach to accessibility will stimulate accessible tourism in Europe and beyond. Although OSSATE recognises the importance of transport when travelling, it will not be covered by OSSATE. Accessible travel and transport issues are addressed by another European project, "ASK-IT".

Given the importance of ICTs in delivering a service for accessibility, OSSATE introduces a high quality, versatile and innovative expansion of tourism information systems for handling data sets for accessible sites and venues in a threefold way.

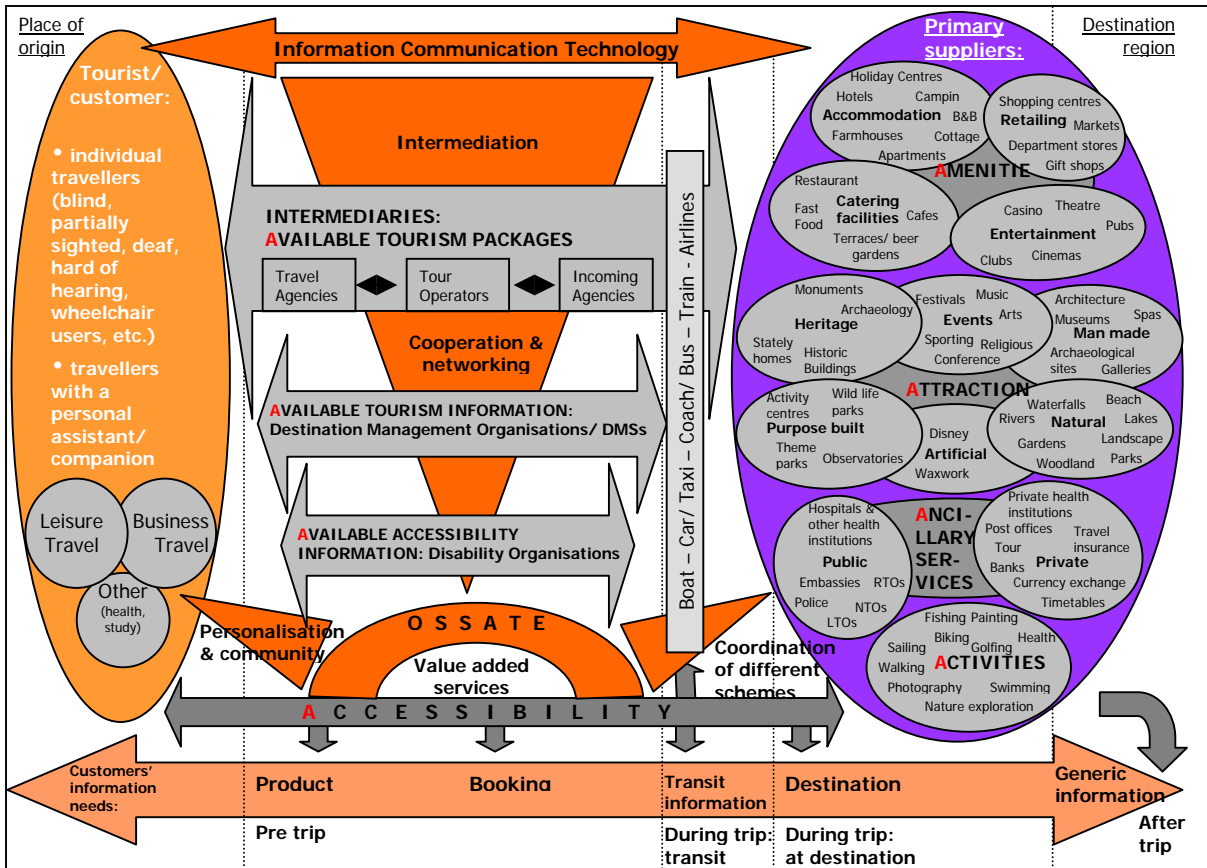
First, all information available with regards to accessible tourism products and services as well as options regarding "accessible pathways" will be amalgamated and presented on an European electronic internet platform.

Secondly, the OSSATE website will be designed to be accessible for all target users. Being able to access information about accessible facilities irrespective of the type of impairment is critical to retrieve information. The service will facilitate online booking via third party distributors.

Thirdly, based on user profiles, the interface navigation will be dynamically adapted to the user's individual needs to support appropriate search as well as presentation features through personalisation.

Figure 6 illustrates how OSSATE embraces the whole spectrum of traveller needs by establishing a special service for accessibility empowered by ICTs. This service comprises 5 core products, which are intermediation, cooperation & networking, personalisation, community and the translation of different accessibility schemes. All products are supported by additional services and add value to both the traveller and the industry.

Figure 6: The tourism system, ICT and OSSATE



Source: adapted from Leiper (1995) & Buhalis (2003) and expanded

Generally, OSSATE aims to bring together all existing and new information on accessible sites and venues. This includes information that is provided by organisations operating accessibility schemes based on professional audits. Furthermore, self-assessed information on accessibility by tourism suppliers will also be incorporated, thereby giving providers the chance to present information thus ensuring the critical mass of the service. For the distribution of all information on accessible facilities, OSSATE will act as an intermediary information system (B2C, B2B2C) that will let users and other intermediaries make multi-lingual and multi-functional searches on existing and new information sources.

E-intermediation is strongly linked to the question of whether an organisation should develop its own web presence or whether to form alliances. Werthner & Klein (1999) state that in order to accelerate the competence building process and to extend the reach and visibility of any kind of activities in the field of intermediation, alliances or cooperative relationships are needed. Within OSSATE, a strong focus is placed on the need to enhance

cooperation of tourism actors across Europe for the delivery of digital content on accessibility. Thus, the OSSATE's e-service is offered by cooperative efforts among a great variety of stakeholders. By linking together all stakeholders into a network, a pool of already existing resources can be established which prevents a reinvention of the wheel. Further, a greater consistency in the provision of information about accessible products and services for all 25 European member states can be expected.

With the development of networks in the provision of accessibility information, a wide range of potential benefits and challenges for all stakeholders emerge. Main potential benefits include access to new markets, greater customer value, high levels of knowledge and expertise at the local, national and European level, research & development as well as increased potential profits for all network participants. Challenges are handling different partners and overcoming burdens of working together with new partners. Interoperability of interfaces and technical integration is also a main challenge. A commercially viable proposition for all partners is needed to ensure the sustainability of the service. Moreover, activities of all partners have to be coordinated by a strong pan-European organisation and conflicting goals and objectives have to be managed in a sensitive way.

Moving on from intermediation and network co-operations, other essential OSSATE products are personalisation features for customers (C2B), the creation of a community (C2C) as well as the coordination of different accessibility schemes.

Powerful search and personalised services are important to customers enabling them to find accessible products and services that correspond to their individual requirements. Through detailed user profiling, that includes types and degree of disability as well as other travel needs and preferences, OSSATE will provide search results that are filtered according to the user's profile. Furthermore, registered users will enjoy a number of additional benefits including newsletters with travel propositions and promotions.

Within the community service of OSSATE, consumers can also interact directly with each other and give feedback and advice on venues. Based on the use of testimonials given by consumers to the community, a chain effect is expected in which good experiences of travellers will convince other potential customers to travel to the same destination.

OSSATE will also undertake mapping of different, already existing accessibility schemes in Europe. Having said earlier that the OSSATE database consists of information given by organisations operating on schemes, it is important to inform the user about the criteria used by each scheme that resulted in accreditation. All comparative information will be given in a descriptive manner in a standardised way using objective measurements to allow users to decide if the facility is accessible for them. Furthermore, OSSATE will incorporate multiple criteria for different requirements.

OSSATE products will also support a number of value added services, such as legislation and architecture advice, consulting, the creation of a market place for accessibility as well as marketing aspects that will add value and contribute to its financial prospects.

The following table provides an overview of key characteristics mentioned above, which are cooperation & networking, intermediation, personalisation and community as well as the coordination of different schemes. These characteristics reflect and outline the expected achievements of the OSSATE project.

**Table 4: Key characteristics of the OSSATE project**

CORE PRODUCTS:	KEY PARAMETERS:
<b>Cooperation &amp; Networking</b>	<ul style="list-style-type: none"> <li>- Pool of resources by drawing together existing resources in the market</li> <li>- Commercially viable proposition for all partners to ensure sustainability</li> <li>- Scalability and flexibility in order to bring together all European destinations</li> <li>- Interoperability in order to exchange data with partners' online databases</li> <li>- Coordination by a strong pan-European network organisation</li> <li>- Greater consistency in the implementation of providing accessible services</li> <li>- Forum for contact and debate for all stakeholders to share knowledge and expertise at all levels</li> <li>- Collaboration with the eAccessibility initiatives of eEurope2005</li> </ul>
<b>Intermediation</b>	<ul style="list-style-type: none"> <li>- Single point of reference for accessible tourism per country and in Europe</li> <li>- Tourist guide to accessible resources, services and products</li> <li>- Provision of an accessible experience in its own right, i.e. e-services which are accessible and grow with their users</li> <li>- Information constantly fresh and updated</li> <li>- Content-driven</li> <li>- E-marketplace supporting bookings from established players</li> </ul>
<b>Personalisation</b>	<ul style="list-style-type: none"> <li>- Based on identification of user interests, preferences and requirements</li> <li>- Consumer-driven</li> <li>- Type and degree of disability concerned</li> <li>- Provision of additional benefits such as newsletters</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>- Feedback-driven e-services as an integrated part of the service, i.e. e-services which will be developed and enhanced through the input of consumers</li> <li>- Provision of a range of enabling and advanced interactive services</li> <li>- Forum for contact for all accessible tourism consumers</li> <li>- Platform for capturing and sharing user experience</li> </ul>
<b>Coordination of different schemes</b>	<ul style="list-style-type: none"> <li>- Directory of innovative practice</li> <li>- Multiple criteria for different user needs</li> <li>- Descriptive &amp; objective</li> <li>- "Best practice" of access schemes existing in Europe (and beyond)</li> </ul>

These are very ambitious characteristics that can only be partly achieved during the project period. Building and running successful e-services cannot be done overnight: users have to be made aware of their existence, be attracted to use them and a loyal community has to be built up. In addition, the services will improve as more accessible supply becomes available.

## 4.5 Research Objectives

In order to investigate whether or not the objectives of the project are appropriate, it is essential to analyse the demand and supply of accessible products and services. The demand and supply analysis determines the market needs for accessibility services and indicates whether the OSSATE characteristics match market requirements. Consequently, the main research objective can be defined as follows:

1. What is the current situation of demand and supply for accessibility?

The main research question looks at the demand for accessibility and investigates the potential market size and market potential. Based on these findings, the consequences for the tourism sector are outlined. The analysis of supply gives an overview of the stakeholders and examines the current supply of accessible products and services. Sub-questions include:

- 1.1. What is the market size for accessibility?
- 1.2. What is the market potential serving the accessibility market?
- 1.3. What are the consequences for the tourism sector?
- 1.4. Who are the key stakeholders for the proposed service?
- 1.5. What are their interests and constraints in the provision of accessible tourism?
- 1.6. How are the big tourism players mapped according to information provision?
- 1.7. What is the proportionate accessible tourism supply within the EU 25?
- 1.8. What is the current situation within the UK and Greece regarding accessibility?

The methodological approach for answering these research questions is elaborated in chapter 5.

## 4.6 Summary: Tourism and Accessibility

Chapter 4 provided an overview of the interrelationship of tourism, accessibility and Information Communication Technologies (ICTs). As access to information is a key prerequisite for all customers, the OSSATE e-service will provide a service that matches the informational needs of all travellers while developing a sustainable business model.

- The tourism system is a complex system, where accessibility is an important component interacting with the customers' need chain, the transit and the destination.
- Whereas physical access is a crucial supply-side issue, it is access to information that determines whether tourism remains an abstract concept or the individual decides to become an active traveller.
- The provision of access to information is the key success factor for tourism destination marketing as it represents a quality criterion for all citizens for retrieving information about accessibility features that in turn will influence the decision-making and booking process.
- Information Communication Technologies (ICTs) provide the essential tools for the dissemination of information for the supply side and represent the key determinants of demand satisfaction since consumers search for tourism products and services in order to maximise the value of their time and money.
- Given the growth rates in terms of ICTs usage, it will dominate the production and consumption of tourism products and services in the future.
- The role of OSSATE is to deliver a service for the provision of accessibility information for the disabled population as well as for the rest of the population empowered by ICTs (OSSATE, 2006).
- The services offered by OSSATE comprise the following key components: intermediation, cooperation & networking, personalisation, community, the coordination of different accessibility schemes and value added services.
- For the service to be able to match market needs and to develop a sustainable business model, the report analyses the current situation of demand and supply for accessibility.

## ***5. Methodology***

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The methodological approach consisted of a multi-disciplinary method, which was built on an extensive literature review and internet research. In order to answer the main research objective, the emphasis was placed on secondary data analysis to investigate the tourism demand worldwide and the supply for accessibility at the European level.

A comprehensive review of literature and websites was undertaken to give details on the actual prevalence figures of disability. The literature and internet review has demonstrated that there is limited research examining tourism for persons with disabilities on a broader scale and that figures vary from source to source. Sources that were used to gather the prevalence figures of disability and demographic structures of the elderly population include international bodies such as Eurostat, Eurobarometer and the US Census Bureau for demographic data as well as national governments that have published statistics on disability per country. National and regional surveys and studies have also been taken into account. Statistical accounts deriving from official bodies have been regarded as the most reliable source for the topic in question. However, data sets from surveys or studies at the regional and national level have been incorporated for a comparison of existing data sets to validate general findings of statistical data.

Although accessibility benefits the whole population, the statistical analysis is based on providing data for people with impairments as well as the elderly population because it is argued that this part of the population actually depends on accessibility information and determines if individuals go travelling or not.

Looking at the supply side, sources that were used to gather data on the current provision of accessible tourism products and services include information given by National Tourism Authorities per country as well as by Eurostat. National Tourism Authorities were regarded as the best source of information to receive national data and figures because these organisations are the destination experts within their respective countries. However, due to the fact that these Destination Management Organisations were not always able to provide the information at the level of detail required for this research due to a lack of existing data sets, contacts with disability organisations and other content providers as well as other tourism organisations had to be established.

## **6. Market Size for Accessibility: Demand**

The identification of target users of the proposed OSSATE service is a key exercise for ensuring that it reflects the needs and expectations of the people it aims to attract. Only if the offered services reflect user preferences and requirements, will users decide to visit the online resources, subscribe to, use and recommend them to others. The OSSATE e-service has only the potential to build a dedicated and growing community and become the single point of reference on accessible tourism in Europe if there is a good match between demand and supply.

It is therefore important to OSSATE to investigate the demand side of the proposed e-service in terms of the market size of potential customers requiring accessibility and the market potential in terms of income to be derived by serving the market. These findings will form the basis for encouraging tourism players to diversify their products and services to suit this market and to target them accordingly.

In order to identify and assess the market size and market potential, Pühretmair (2004) stresses that it is essential to assess first the external environment in terms of two main parameters.

1. Identification of the general prevalence of disability in European countries in order to determine the share of the population in each country with access needs
2. Exploration of specific travel patterns of disabled customers

Within the first part of the market analysis, general prevalence figures of disability in Europe are identified. Further, statistical accounts are given for various types of disabilities per country as well as for the demographics of the ageing population. This includes data on the ageing population that give important insights for the total demand for accessibility.

By gathering prevalence figures on various types of disability as well as on the ageing population, it is possible to group types of customers according to their accessibility requirements ranging from mild to severe. Further, an overview of the total market size for accessibility per segment and per country is gained.

The second part of the analysis examines specific travel patterns of disabled customers in terms of travel motivations, travel planning, travel intensity and frequency, travel companions, destinations, travel duration, seasonality and travel spending. Examples are given on the basis of a few selected country/ region surveys.

These travel patterns, in particular findings on spending power, and the absolute number of the market size identified earlier will form the basis for evaluating the market potential in terms of the benefits to be accrued to those tourism suppliers that offer suitable accessible facilities and accessibility information for customers.



## 6.1 General Prevalence of Disability in European Countries and Worldwide

Absolute figures of the prevalence of disability are difficult to estimate due to a lack of standardised data and a lack of comprehensiveness. The figures presented in this chapter, given by various organisations and studies, reflect the ongoing efforts to determine the prevalence of disability at the international level. They emphasise the need for harmonisation of the methods used in different countries to collect comparable data of a population still hidden in statistical records.

Despite existing problems in the collection of data, authors and organisations agree that persons with disabilities represent a significant part of the population. It has been estimated that there are 600 million to 859 million people with disabilities worldwide (van Horn, 2002; Horgan-Jones & Ringaert, 2004).

Several countries demonstrate that this is a significant proportion of the market. In the US alone, the U.S. Census Bureau (U.S. Department of Commerce, 1997) reported that nearly 21% of the US population, approximately 54 million people had some level of disability. A more recent study reported that individuals with disabilities account for 50-80 million individuals in the US (Stumbo & Pegg, 2005). Assuming that incidence rates by age remain the same, by 2030 nearly 24% of the total U.S. population will be disabled (and over 15% severely disabled). The total disabled population will increase by 30.9 million and the severely disabled population will increase by 21 million, when compared to 1997 (U.S. Department of Commerce, 1997).

In Canada, the percentage of persons with disabilities was 15.5% in 1991 (van Horn, 2002). This makes a potential travel market of more than 2.7 million in Canada. Further, as the population ages, the travel market for people with disabilities will grow. In 1991, statistics Canada reported that 45% of persons with disabilities in Canada were 65 years of age or older. By 2041, about 23% of the Canadians will be over 65, up from 12% in 1995 (Horgan-Jones & Ringaert, 2004).

In 1993, an estimation of more than 3 million persons or 18% of the Australian population were classified as having a disability. Of those people with a disability, more than 2.5 million have a handicap with varying levels of severity. 2.4% of the Australian population were classified as experiencing profound handicaps, 1.7% and 2.6% with severe and moderate respectively and 5.3% with mild levels of handicaps (Darcy, 1998a). As disability increases significantly with age, the prevalence of disability rises. For people 75 years and older, the disability rate is 14 times in comparison to people aged 35 to 44 years (disability rate of 2) (Darcy, 1998a).

Statistics New Zealand (1997) reported that about 20% of the population experiences a self perceived limitation in activity resulting from a long-term condition or health problem. By relating this percentage to the New Zealand's population of 4 million, a domestic disabled traveller market of 80.000 would be generated (Shelton & Tucker, 2005.)

By looking at the prevalence of disability in Europe, various authors and organisations have estimated the total number of disabled people. Table 5 gives an overview of the different estimations, percentages and sources.

**Table 5: Estimations of prevalence of disability in Europe**

Estimation (total number)	% of population	Sources/ references
About 45 million (working age population/ aged 16 to 64) in 25 European countries	15.7%	➤ Dupré & Karjalainen published in Eurostat (2003)
45 to 90 million in Europe having at least one type of impairment	10% to 20%	➤ Toerisme Vlaanderen (2001) ➤ National Disability Authority (2003) (Ireland)
50 million in the enlarged European Union	Approx. 11%	➤ European Disability Forum, 2005 ➤ Gerlin, 2005 ➤ Qualitas, 2004 ➤ Brown, 1991 ➤ van Horn, 2002 ➤ Horgan-Jones & Ringaert, 2004
69 to 92 million in the European Union	15% to 20%	➤ Pühretmair, 2004
60 to 80 million disabled/ people with reduced mobility	13% to 17%	➤ Community Research and Development Information Service CORDIS (1995)
92 to 115 million in the EU	20% to 25%	➤ Stumbo & Pegg (2005)

Having synthesised existing research, it is noticeable that estimates for disability vary greatly from source to source. For the purpose of this report, the data set by Dupré and Karjalainen published in Eurostat (2003) is used since it is widely regarded as the most reliable and detailed source in terms of prevalence figures of disability per type of impairment and per country.

It has to be kept in mind, that the statistics given by Eurostat (2003) only refer to the population that is 16 to 64 years old. Further, the data sets given focus on impairments as well as long-standing health problems that cause disabling conditions. According to Eurostat (2003), disabled persons were those who stated that they have a long-standing health problem or impairment (LSHPD) for 6 months or more or expected to be 6 months and more. The term disability is sometimes synonymously used as the term impairment.

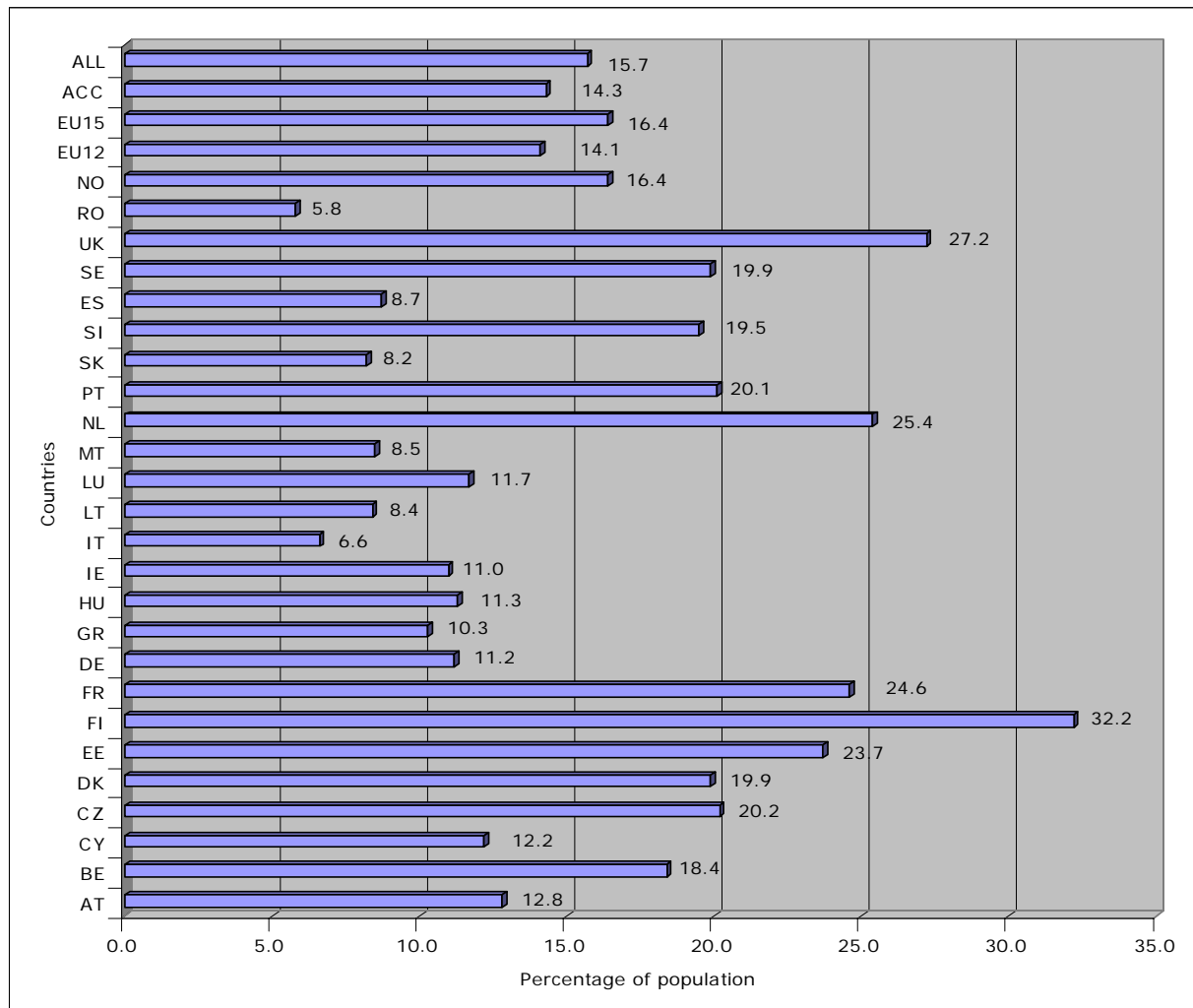
According to Eurostat (2003), the total number of the population with LSHPD in 25 European countries is estimated to account for more than 45 million citizens. This means that one in six persons (15.7%) of the working age population (aged 16 to 64) has either a long-standing health problem or a disability. This figure is the most prudent estimation of all sources given in table 5. It is expected that the actual figure is higher since no account has been given for the population that is under 16 and over 64 years old. Further, in several countries people tend to not declare a disability to avoid social stigma.

The percentages of the prevalence of LSHPD vary widely among European countries (Figure 7). The highest percentage can be found in Finland (32.2%), followed by the UK (27.2%) and the Netherlands (25.4%). The lowest percentage rates are found in Romania (5.8%) and Italy (6.6%) (Eurostat, 2003).

Although these figures demonstrate a clear indication of each country, it seems that they are biased towards different perceptions of disability and long-standing health problems. Further they might be also related to health-related benefits. In countries with generous social allowance for disability benefits, such as in Scandinavian countries, there is a higher proportion of disabled people, whilst in countries with limited disability benefits or stricter views of who actually qualifies as disabled, the proportion decreases dramatically. Hence these statistics have to be assessed with this consideration in mind. Further, the wide-

ranging spectrum of disability occurrences per country might also reflect differences in how respondents perceived the questions. Although attention was paid by the researchers to translating the questions, the replies could have been mediated by cultural traits.

**Figure 7: Occurrence of LSHPD in Europe (population: 16-64)**



**Country codes and codes for geographical aggregates:**

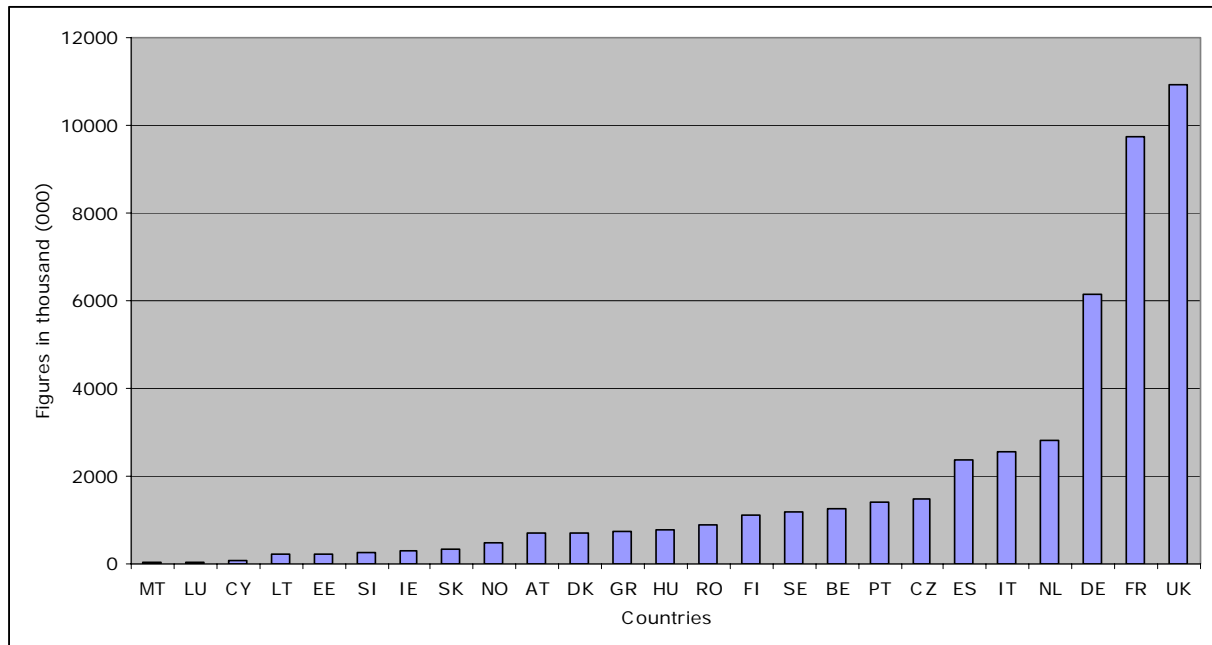
**BE** = Belgium, **DK** = Denmark, **DE** = Germany, **GR** = Greece, **ES** = Spain, **FR** = France, **IE** = Ireland, **IT** = Italy, **LU** = Luxembourg, **NL** = Netherlands, **PT** = Portugal, **AT** = Austria, **FI** = Finland, **SE** = Sweden, **UK** = United Kingdom, **EU 15** = European Union, **EU 12** = Eurozone, **CZ** = Czech Republic, **EE** = Estonia, **CY** = Cyprus, **LT** = Lithuania, **HU** = Hungary, **MT** = Malta, **SI** = Slovenia, **SK** = Slovak Republic, **ACC** = Acceding Countries, **NO** = Norway, **RO** = Romania, **All** = EU 15, ACC, NO + RO)

Source: Eurostat, 2003

A similar ranking of the prevalence of people with disabilities is given by the Eurobarometer (2001), however with smaller percentages, mainly because different sets of methodological approaches have been employed. Further, the study by Eurostat (2003) has also taken into account long-standing health problems in addition to disabilities and has been published 3 years later than the research by the Eurobarometer (2001).

In order to give a detailed analysis on the actual prevalence figures per country, the next figure provides an overview of absolute numbers of citizens with long-standing health problems or disability for the population aged 16-64.

**Figure 8: Occurrence of LSHPD in Europe (absolute numbers/ population: 16-64)**



**Country codes:**

**AT** = Austria, **BE** = Belgium, **CY** = Cyprus, **CZ** = Czech Republic, **DK** = Denmark, **DE** = Germany, **EE** = Estonia, **ES** = Spain, **FI** = Finland, **FR** = France, **GR** = Greece, **HU** = Hungary, **IE** = Ireland, **IT** = Italy, **LU** = Luxembourg, **LT** = Lithuania, **MT** = Malta, **NL** = Netherlands, **NO** = Norway, **PT** = Portugal, **RO** = Romania, **SE** = Sweden, **SI** = Slovenia, **SK** = Slovak Republic, **UK** = United Kingdom

Source: Eurostat, 2003

Countries that have the highest number of people with LSHPD are the United Kingdom with more than 10 million, followed by France with nearly 10 million and Germany with more than 6 million. Countries with the lowest number of people with LSHPD comprise Malta, Luxembourg and Cyprus, mainly because of their low population figures in general.

**Table 6: Disabled population per country (16-64 years)**

Country	%	In thousands*	Country	%	In thousands*
MT = Malta	8.5	23	RO = Romania	5.8	901
LU = Luxembourg	11.7	36	FI = Finland	32.2	1,123
CY = Cyprus	12.2	64	SE = Sweden	19.9	1,173
LT = Lithuania	8.4	208	BE = Belgium	18.4	1,253
EE = Estonia	23.7	214	PT = Portugal	20.1	1,409
SI = Slovenia	19.5	277	CZ = Czech Rep.	20.2	1,470
IE = Ireland	11.0	299	ES = Spain	8.7	2,386
SK = Slovak Rep.	8.2	317	IT = Italy	6.6	2,556
NO = Norway	16.4	495	NL = Netherlands	25.4	2,823
AT = Austria	12.8	710	DE = Germany	11.2	6,161
DK = Denmark	19.9	715	FR = France	24.6	9,726
GR = Greece	10.3	734	UK = United Kingdom	27.2	10,930
HU = Hungary	11.3	782			

\* Calculations are based on demographic structures given by the U.S. Census Bureau, 2005

Source: Eurostat, 2003

Up to today, no figures are given for the population under 16 and over 64 at the European level using the same set of data collection. However, country specific analyses have revealed that the percentage of the prevalence of disability for the population under 16 accounts for only 2-5%, whereas nearly three quarter of the total disability population is

found in the age group that is older than 55 (Schmidt, 2004, Statistisches Bundesamt, 2005). This supports the assumption that most of the disabilities and long-standing problems occur during life and only few people are born with it.

Several countries estimated the total disabled population based on different data collection methods. Statistical accounts from Germany and the UK give some insights and limitations in determining the total number of disabled citizens.

According to the German National Institute for Statistics (Statistisches Bundesamt, 2003a), the number of severely disabled people lies at around 6.7 million. Adding mild and moderate disabilities brings the estimation to approximately 10%-13% of the whole German population (Cloerkes, 2001; Thimm, 1994), which represent 8.2 to 10.7 million people in Germany who experience mild to severe disabilities and health problems.

In the UK, current estimates suggest that there are around 9 million disabled people that are recognised under the Disability Discrimination Act (DDA) (Veitch & Shaw, 2004a). This represents some 15% of the population. The figure includes around 6.5 to 6.8 million people of working age having a disability, one fifth of the total working age population (Phillips, 2002). The DDA however does not count people with mild to moderate long-standing health problems since it covers only people with "a physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities" (Disability Rights Commission, 2005). Therefore, it can be expected that the number including mild to moderate health problems will be higher.

Disabled European citizens are integrated with the rest of the population as one in four Europeans has a family member affected by a disability (European Disability Forum, 2005; Qualitas, 2004). The UK has the highest frequency of having a family member who has a disability. Table 7 ranks countries with the highest cumulative frequency of contacts if it is a family member who has a disability together with the European average.

**Table 7: Ranking of European countries: family members affected by a disability**

Country	Percentage	European average
United Kingdom	72.0%	<b>59.0%</b>
Greece	67.0%	
Spain	67.0%	
Portugal	63.0%	
Italy	61.0%	
Germany	59.4%	

Source: Eurobarometer, 2001

Looking at European citizens stating that they have a friend who has at least one type of impairment, most of the Southern countries have the highest "cumulative frequency" of contacts if it is a friend living with an impairment.

**Table 8: Ranking of European countries: friends affected by a disability**

Country	Percentage	European average
Spain	56.0%	<b>38.0%</b>
Portugal	56.0%	
Greece	42.0%	
Ireland	41.0%	
Italy	39.0%	

Source: Eurobarometer, 2001

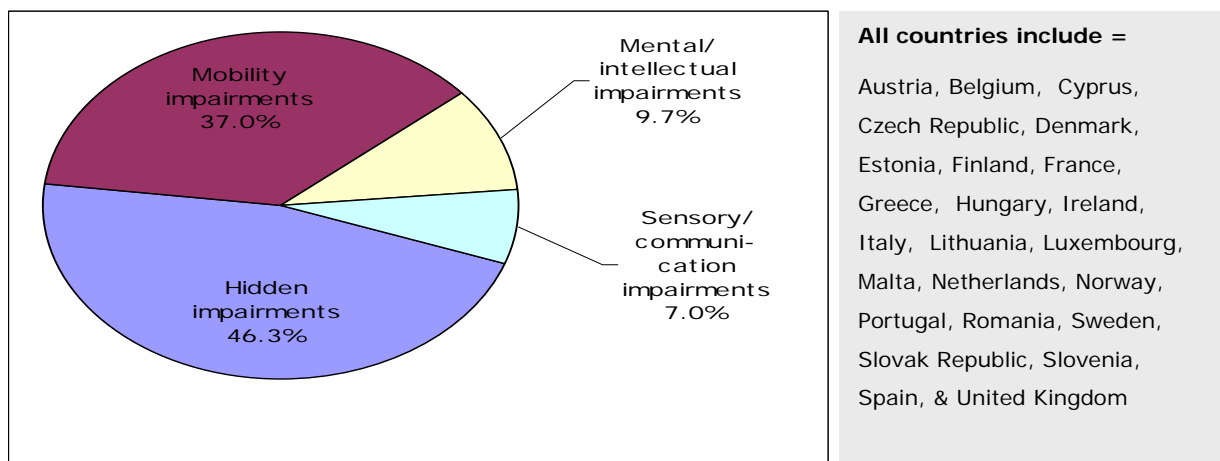
These percentages have important implications for the travel industry, as people whose family and friends have a LSHPD, are likely to travel in their company. This influences the destinations and suppliers selected, the activities undertaken and the channels used. Further it has an important economic impact in terms of the multiplier effect on the overall travel expenditure (Eurostat, 2003; Eurobarometer, 2001; Pühretmair, 2004).

## 6.2 Major Types of Disability in Europe

As explained in the introduction, disabling conditions can arise from a variety of impairments and health problems. The four major types of LSHPD were outlined as mobility impairments, sensory and communication impairments, mental/ intellectual impairments as well as hidden impairments. Figure 9 shows the distribution of the four major types of impairments and health problems within 25 European countries for the population that is 16 to 64 years old.

Mobility impairments and hidden impairments comprise the two largest groups in terms of the distribution of long-standing health problems and disabilities in the countries under investigation, with 37% and 46.3% respectively. Mental/ intellectual impairments account for 9.7%. Sensory and communications impairments are experienced by 7% of the population in 24 European countries.

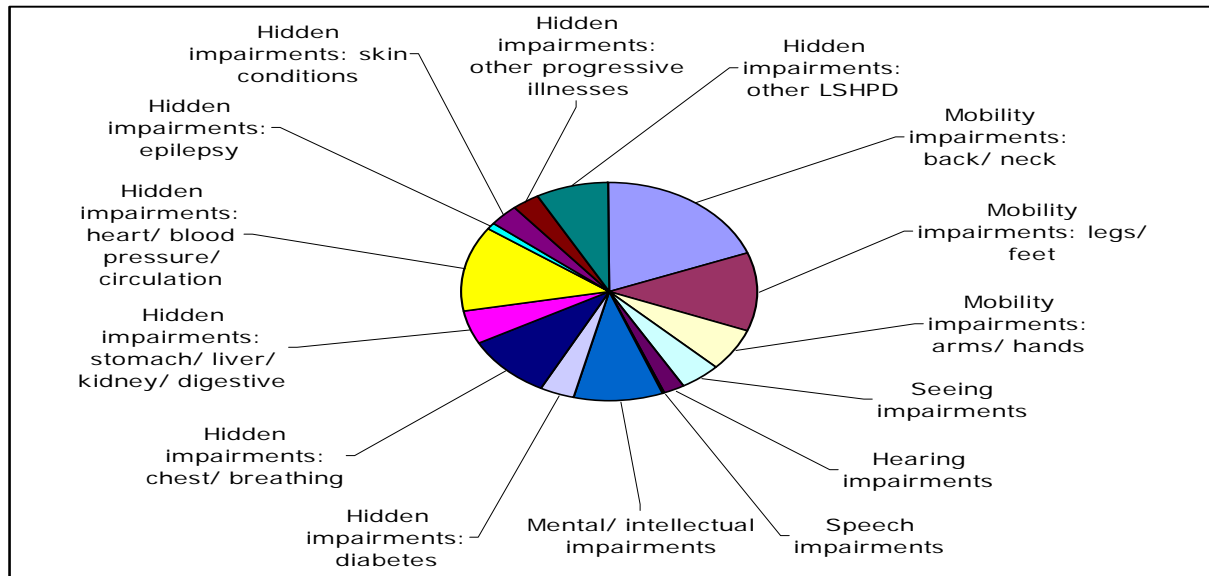
**Figure 9: Distribution of major four types of LSHPD (all countries)**



Source: Eurostat, 2005b

Splitting these main groups into their subcategories, a more detailed analysis is gained in terms of the distribution of all types of LSHPD. Figure 10 shows the distribution of all subcategories (population 16-64) in 24 European countries. It reveals that the highest percentage can be found in the mobility impaired category affecting people's neck or back (19.3%), followed by hidden illnesses that are caused by dysfunctions of the heart, blood pressure or circulation problems (12.7%) and mobility impairments affecting people's legs or feet (11.3%). On a similar percentage rate are hidden impairment in terms of chest or breathing problems (9.4%) and mental/ intellectual impairments (9.3%).

**Figure 10: Distribution of subcategories of LSHPD (all countries)**



**All countries include:**

Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Spain, Finland, France, Greece, Hungary, Ireland, Italy, Luxembourg, Lithuania, Malta, Netherlands, Norway, Portugal, Romania, Sweden, Slovenia, Slovak Republic & United Kingdom

Source: Eurostat, 2005b

## 6.3 Types of Disability per European Country

The next section investigates all types of LSHPD in greater detail and gives references to the prevalence of each type in each of the 24 countries under investigation. All estimations for prevalence figures are based on the survey published in Eurostat (2005b). While Germany was included in the survey conducted by Eurostat and total percentages for the population aged 16 to 64 could be obtained, it did not implement questions of the distribution of types of LSHPD in its respective country survey. Given the fact that Germany has the largest population in the enlarged EU and has reported more than 6 million disabled and health-impaired citizens at the age of 16 to 64 a separate account for Germany is made for the types of impairments. Neglecting figures for this country would fail to give a comprehensive picture on the types of impairments per country and the total market size for accessibility. However, it has to taken into account that figures given for Germany are not based on estimates by Eurostat but by the German National Institute for Statistics. This source only counts the population (aged 16 to 64) that is severely impaired and does not take into account mild to modest impairments. However, the numbers give some indications for prevalence figures in Germany.

### 6.3.1 Mobility Impairments

Since mobility impairments represent varying levels of physical mobility, Eurostat (2005b) divides mobility impairments into 3 categories: back/ neck, legs/ feet and arms/ hands.

Table 9 provides an overview of the prevalence percentage rates per types of mobility in 24 countries. The highest percentage rates can be found in Luxembourg, followed by Austria and Norway.

By relating these percentages to the total disabled population aged 16 to 64, the highest prevalence figures can be found in France with 3.8 million, the UK with 3.5 million and the Netherlands with 1.3 million.

According to the German National Institute of Statistics (Statistisches Bundesamt, 2003a), the total number of mobility impaired Germans account for more than 1.1 million of the disabled population aged 16 to 64 (17% of the severely disabled population). Splitting this number into the subcategories reveals that 6% of these have problems with arms or hands, 5.6% has mobility restrictions with regards to legs and feet and 5.4% experience mobility restrictions cause by back or neck problems.

Depending on the level of mobility impairment, people affected by mobility impairments have different accessibility requirements ranging from very high accessibility needs to low or modest access requirements.

**Table 9: Population and % of mobility impaired people in Europe (16-64 years)**

Countries	Problems with arms or hands		Problems with legs or feet		Problems with back or neck		TOTAL: MOBILITY IMPAIRMENTS (LSHPD)	
	Number	%	Number	%	Number	%	Number	%
Lithuania	*0	*	20,600	9.9	19,300	9.3	<b>39,900</b>	<b>19.2</b>
Romania	45,100	5	104,500	11.6	53,200	5.9	<b>202,700</b>	<b>22.5</b>
Greece	22,800	3.1	83,700	11.4	60,200	8.2	<b>166,600</b>	<b>22.7</b>
Ireland	1,640	5.5	23,300	7.8	42,200	14.1	<b>81,900</b>	<b>27.4</b>
Hungary	13,300	1.7	140,800	18	88,400	11.3	<b>242,400</b>	<b>31.0</b>
United Kingdom	590,200	5.4	1,169,500	10.7	1,726,900	15.8	<b>3,486,700</b>	<b>31.9</b>
Finland	88,700	7.9	101,100	9	172,900	15.4	<b>362,700</b>	<b>32.3</b>
Czech Republic	66,200	4.5	194,000	13.2	269,000	18.3	<b>529,200</b>	<b>36.0</b>
Estonia	15,000	7	27,600	12.9	34,700	16.2	<b>77,300</b>	<b>36.1</b>
Malta	*1,800	7.7*	*2,300	9.9*	4,400	19.1	<b>*8,400</b>	<b>36.7</b>
Cyprus	3,400	5.2	7,200	11.2	13,600	21.3	<b>24,100</b>	<b>37.7</b>
Italy	204,500	8	350,200	13.7	426,900	16.7	<b>981,500</b>	<b>38.4</b>
France	671,100	6.9	1,021,200	10.5	2,071,600	21.3	<b>3,764,000</b>	<b>38.7</b>
Portugal	80,300	5.7	183,200	13	283,200	20.1	<b>546,700</b>	<b>38.8</b>
Spain	147,900	6.2	317,300	13.3	467,700	19.6	<b>932,900</b>	<b>39.1</b>
Slovakia	11,400	3.6	46,300	14.6	67,800	21.4	<b>125,500</b>	<b>39.6</b>
Slovenia	13,000	4.7	30,200	10.9	74,200	26.8	<b>117,400</b>	<b>42.4</b>
Sweden	103,200	8.8	103,200	8.8	294,400	25.1	<b>500,900</b>	<b>42.7</b>
Belgium	70,200	5.6	119,000	9.5	347,100	27.7	<b>536,300</b>	<b>42.8</b>
Denmark	47,900	6.7	73,600	10.3	199,500	27.9	<b>321,000</b>	<b>44.9</b>
Netherlands	282,300	10	290,800	10.3	711,400	25.2	<b>1,284,500</b>	<b>45.5</b>
Norway	86,600	17.5	49,000	9.9	102,500	20.7	<b>238,100</b>	<b>48.1</b>
Austria	49,700	7	115,700	16.3	188,200	26.5	<b>353,600</b>	<b>49.8</b>
Luxembourg	3,400	9.4	4,900	13.5	11,200	31	<b>19,400</b>	<b>53.9</b>

\* Unreliable or uncertain data

Note: Calculations are based on demographic structures given by the U.S. Census Bureau, 2005

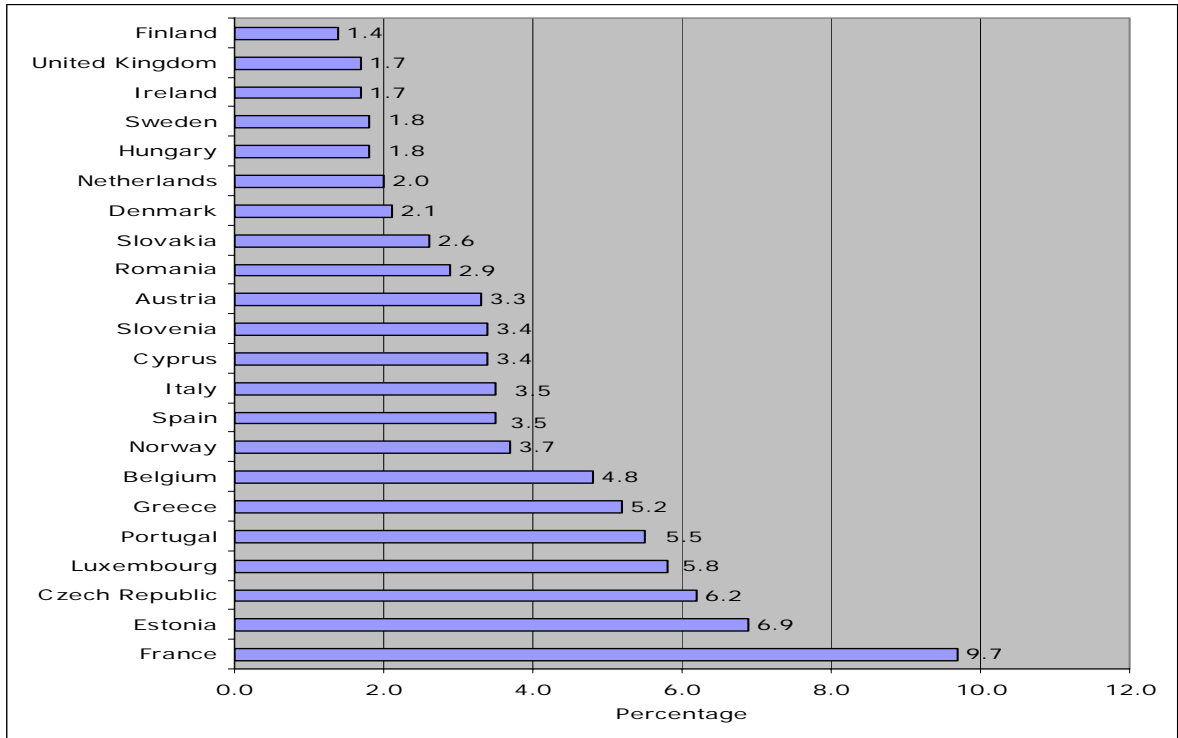
Source: Eurostat, 2005b



### 6.3.2 Sensory/ Communication Impairments

Lack of official statistics and varying definitions of blindness and partial sight make it difficult to calculate accurate numbers. Estimations by Eurostat (2005b) included all kinds of visual impairments (Figure 11).

**Figure 11: Percentage of visually impaired people in Europe (population 16-64)**



Note: No data available for Lithuania and Malta

Source: Eurostat, 2005b

As presented in Table 10, percentage rates for visually impaired people ranging from 1.4% of the disabled population to the highest percentage of visual impaired people in France with 9.7%. The high percentage reported from France accounts for more than 940.000 people with visual impairments. This represents the highest number of visual impaired people in the countries under investigation. The second highest number, nearly 200.000 is found for the UK. This is despite is relatively low percentage of 1.7%.

**Table 10: Population of visually impaired people in Europe (16-64 years)**

Country	Population	Country	Population
<b>Luxembourg</b>	2,100	<b>Austria</b>	23,400
<b>Cyprus</b>	2,200	<b>Romania</b>	26,100
<b>Ireland</b>	5,100	<b>Greece</b>	38,200
<b>Slovakia</b>	8,200	<b>Netherlands</b>	56,500
<b>Slovenia</b>	9,400	<b>Belgium</b>	60,100
<b>Hungary</b>	14,100	<b>Portugal</b>	77,500
<b>Estonia</b>	14,800	<b>Spain</b>	83,500
<b>Denmark</b>	15,000	<b>Italy</b>	89,500
<b>Finland</b>	15,700	<b>Czech Rep.</b>	91,100
<b>Norway</b>	18,300	<b>UK</b>	185,800
<b>Sweden</b>	21,100	<b>France</b>	943,400

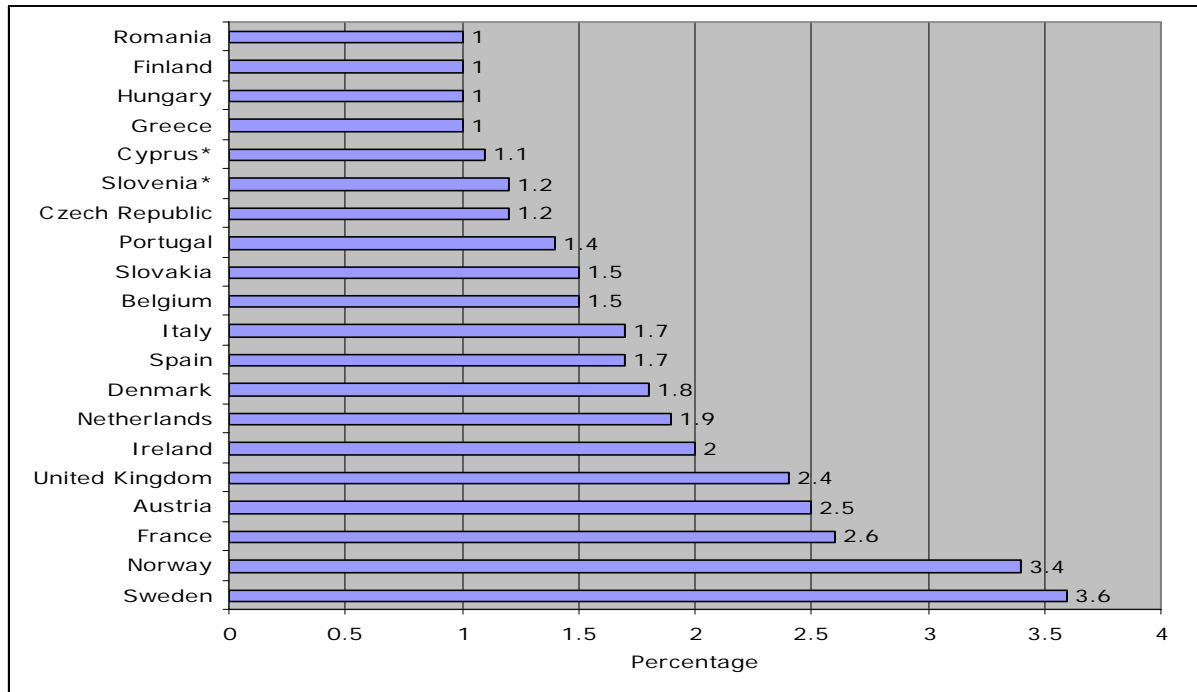
Note: Calculations are based on demographic structures given by the U.S. Census Bureau, 2005

Source: Eurostat, 2005b

Severe visual impairments in Germany are estimated at more than 100,000. This is 1.6% of the severely disabled population of 6.7 million (Statistisches Bundesamt, 2003a).

Looking at the second type of sensory impairments, countries with the highest percentage in terms of citizens with hearing impairments comprise Sweden and Norway, with 3.6% and 3.4% respectively (Eurostat, 2005b).

**Figure 12: Percentage of hearing impaired people in Europe (population 16-64)**



\*unreliable or uncertain data

Note: No data available for Estonia, Lithuania, Luxembourg and Malta

Source: Eurostat, 2005b

Actual figures for hearing impaired citizens are the highest in the UK and in France with more than 250,000 people experiences hearing limitations.

**Table 11: Population of hearing impaired people in Europe (16-64 years)**

Country	Population	Country	Population
Cyprus	700	Czech Rep.	17,600
Slovenia	*3,300	Austria	17,800
Slovakia	4,800	Belgium	18,800
Ireland	6,000	Portugal	19,700
Greece	7,300	Spain	40,600
Hungary	7,800	Sweden	42,200
Romania	9,000	Italy	43,500
Finland	11,200	Netherlands	53,600
Denmark	12,900	France	252,900
Norway	16,800	UK	262,300

\*unreliable or uncertain data

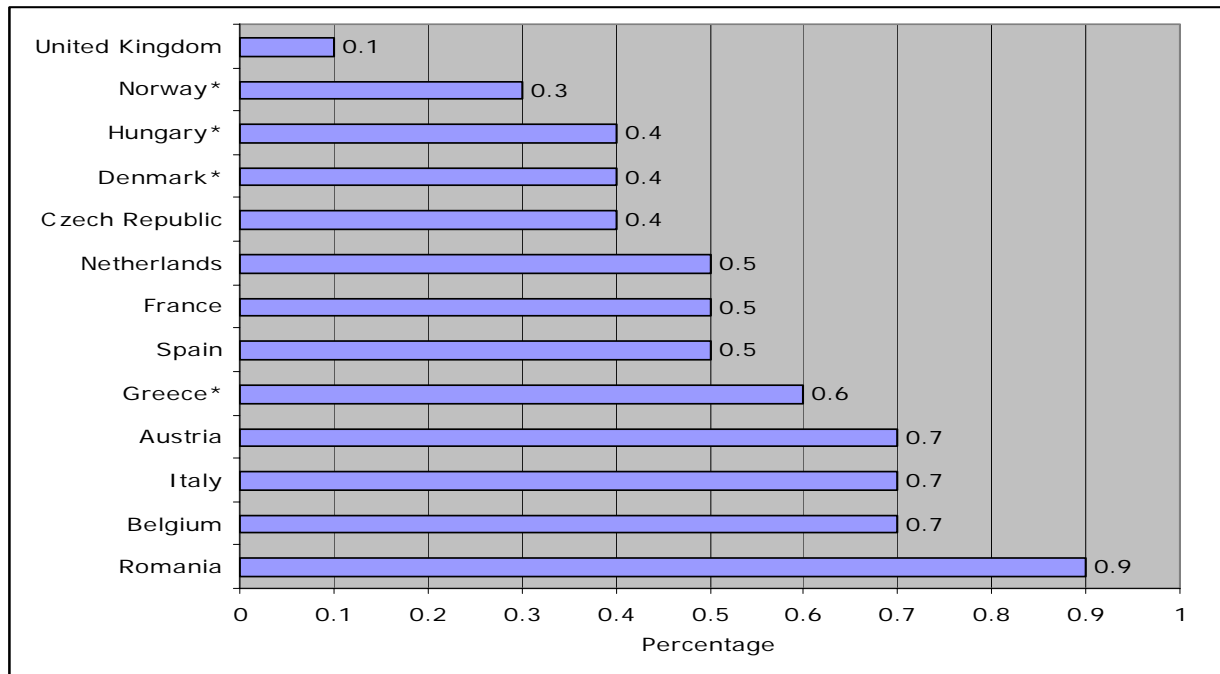
Note: Calculations are based on demographic structures given by the U.S. Census Bureau, 2005

Source: Eurostat, 2005b

The percentage of severely hearing-impaired citizens in Germany is 2.1%. By relating this figure to the disabled population, more than 100,000 Germans are deaf or have severe restrictions in their hearing capabilities (Statistisches Bundesamt, 2003a).

Communication/ speech impairments are the least documented type of impairments since data is not made available or non-existing in many countries. Based on estimations by Eurostat (2005b), speech impairment occurs with the lowest percentage rates throughout Europe. The highest percentage of speech impaired citizens can be found in Romania with 0.9%, followed by Austria, Italy and Belgium with 0.7% (Eurostat, 2005b).

**Figure 13: Percentage of speech impaired people in Europe (population 16-64)**



\*unreliable or uncertain data

Note: No data available for Estonia, Ireland, Cyprus, Lithuania, Luxembourg, Malta, Portugal, Slovenia, Slovakia, Finland and Sweden

Source: Eurostat, 2005b

As in the sensory impaired category, France and the UK reveal the highest absolute numbers when relating the percentages to the total disabled population. The UK reported more than 100,000 citizens with speech impairments and France around 50,000.

**Table 12: Population of speech impaired people in Europe (16-64 years)**

Country	Population	Country	Population
Norway	*1, 500	Belgium	8,800
Denmark	*2,900	Spain	11,900
Hungary	*3,100	Netherlands	14,100
Greece	*4,400	Italy	17,900
Austria	5,000	FRANCE	48,600
Czech Rep.	5,900	UK	109,300
Romania	8,100		

\*unreliable or uncertain data

Note: Calculations are based on demographic structures given by the U.S. Census Bureau, 2005

Source: Eurostat, 2005b

Speech limitations that belong to the severest category of disablement account for only 0.1% of the disabled German population. This represents about 5000 people affected by this impairment. The reason for this low number is the way severe disablement is defined in Germany. Severe disablement refers to the gravity of barriers to participation in normal life. Speech limitations only fall under this category in exceptional cases (Statistisches Bundesamt, 2003a).

### 6.3.3 Intellectual/ Mental Impairments

Among the five prevailing types of LSHPD (Figure 10), mental/ intellectual impairments can be found. This type of LSHPD has often been neglected in statistical accounts of disabilities since the focus has been placed on mobility impaired, blind or partially seeing or deaf or partially hearing (Toerisme Vlaanderen, 2001; Veitch & Shaw, 2004a).

A study by the Pomona project (2004), using the definition of intellectual disability, estimated the prevalence of all types of intellectual disability within EU 25. According to their estimates, 0.3% of the European population is affected by moderate, severe and profound intellectual disability and considering all levels of intellectual disability (including mild intellectual disability) the figures will rise up to 1% to 3%.

By relating these percentages to the population of the EU 25, prevalence estimates 1.4 million people with moderate, severe and profound intellectual disability and between 4.5 and 13.5 million people with all levels of intellectual disability (Table 13).

**Table 13: Estimated prevalence figures for intellectual disability in EU 25**

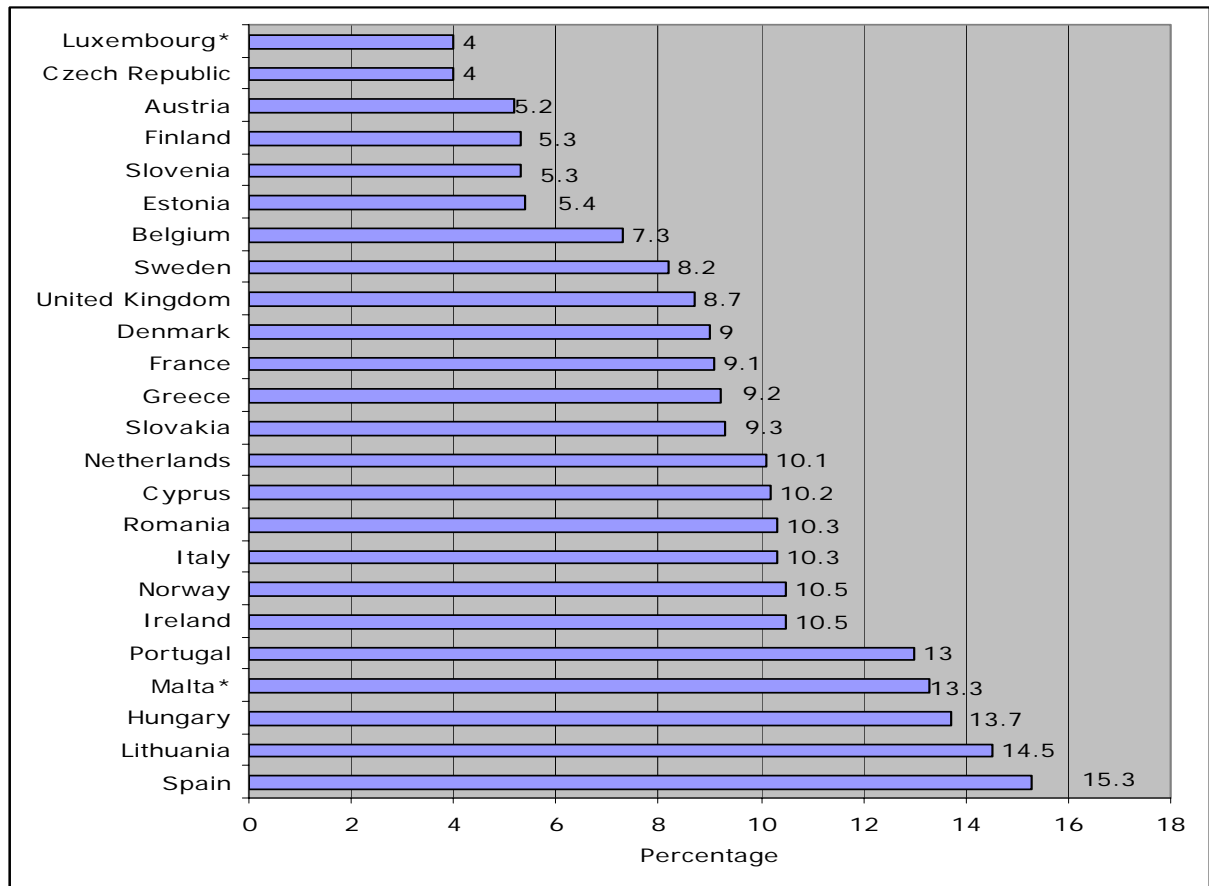
Population of 25 EU member states: 451.3 million	Moderate, severe & profound intellectual disability	All intellectual disability, including mild intellectual disability
% of population of all 25 EU member states	0.3%	1% to 3%
Total EU population figures of all 25 EU member states	<b>1.4 million</b>	<b>4.5 million to 13.5 million</b>

Source: Pomona, 2004

Statistics given by Eurostat (2005b) have estimated the prevalence of mental disabilities in European countries (16-64 years) by taking into account mental, nervous and emotional illnesses and problems. The total figure for this category accounts for nearly 5 million citizens in Europe.

Figure 14 provides an overview of the distribution of mental, nervous and emotional LSHPD in European countries. Spain has the highest prevalence of mental LSHPD, followed by Lithuania and Hungary (Eurostat, 2005b)

**Figure 14: Percentage of mentally impaired people in Europe (population 16-64)**



\*unreliable or uncertain data

Source: Eurostat, 2005b

Spain's percentages relate to more than 350,000 mentally impaired people. Figures for France and the UK account for almost 900,000 and 950,000 people respectively.

**Table 14: Population of mentally impaired people in Europe (16-64 years)**

Country	Population	Country	Population
Luxembourg	*1,400	Denmark	64,400
Malta	*3,100	Greece	67,200
Cyprus	6,500	Belgium	91,500
Estonia	11,600	Romania	92,800
Slovenia	14,700	Sweden	96,200
Slovakia	29,500	Hungary	107,100
Lithuania	30,200	Portugal	183,200
Ireland	31,400	Italy	263,300
Austria	36,900	Netherlands	285,100
Norway	52,000	Spain	365,100
Czech Rep.	58,800	France	885,100
Finland	59,500	UK	950,900

\*unreliable or uncertain data

Note: Calculations are based on demographic structures given by the U.S. Census Bureau, 2005

Source: Eurostat, 2005b

German figures for severely mental impaired people are lower than the number given for the UK and France with more than 700.000 people experiencing severe mental problems. This is 11% of the German severely disabled population (Statistisches Bundesamt, 2003a).

### 6.3.4 Hidden Impairments

Eurostat's estimations of the prevalence of hidden impairments in European countries (population 16-64) comprise the following illnesses: heart, blood pressure or circulation problems, chest or breathing problems, stomach, liver, kidney or digestive problems, skin conditions including allergies, diabetes and epilepsy, other progressive illnesses such as Parkinson's disease as well as other long-standing health problems.

Countries with the highest percentage of hidden impairments comprise Romania and Greece, followed by Finland and Lithuania. The following table gives an overview of the distribution of hidden impairments in Europe (Eurostat, 2005b).

**Table 15: Percentage of people with hidden impairments in Europe (16-64 years)**

Countries	Skin conditions, including allergies	Chest or breathing problems	Heart, blood pressure or circulation problems	Stomach, liver, kidney or digestive problems	Diabetes	Epilepsy	Other progressive illnesses, incl. Parkinson's disease	Other long-standing health problems	TOTAL: hidden impairments
Malta*	*0.0	*9.9	17.3	*0.0	*9.9	*0.0	*0.0	*0.0	17.3
Luxembourg*	*2.3	5.6	7.9	*4.6	*3.1	*0.0	*2.6	7.6	21.1
Norway*	1.8	4.7	4.2	1.7	1.6	*1.0	2.3	6.0	22.3
Estonia*	5.0	*4.7	20.9	9.4	*2.7	*0.0	*0.0	*3.3	35.3
Netherlands	1.3	8.9	5.6	4.7	1.4	1.2	2.4	10.6	36.1
Austria	2.4	6.5	10.4	3.8	4.3	0.9	3.7	6.3	38.3
France	3.1	7.3	10.6	4.0	3.9	0.7	3.8	6.0	39.4
Spain	1.0	6.1	11.0	4.8	3.6	1.1	4.8	7.5	39.9
Portugal	1.7	7.3	9.1	5.9	4.5	1.4	3.4	7.4	40.7
Denmark	4.6	7.2	9.6	5.2	4.1	1.5	3.0	6.5	41.7
Belgium	2.4	6.1	9.6	5.2	3.5	0.9	4.2	11.0	42.9
Sweden	7.0	7.0	5.8	5.2	4.3	0.9	2.1	11.0	43.3
Cyprus*	*0.0	5.3	20.7	7.5	7.3	*0.0	3.8	*1.2	44.6
Italy	2.2	4.5	14.6	5.8	4.0	0.8	3.6	9.7	45.2
Slovakia	1.6	6.6	20.2	4.9	4.9	1.9	3.4	2.4	45.9
Slovenia*	2.0	5.7	14.1	5.6	5.4	*0.8	2.4	11.7	46.9
Hungary*	*0.5	4.6	26.9	7.6	3.9	1.0	3.7	3.8	51.5
Czech Rep.*	6.3	6.9	18.1	7.6	4.7	1.1	*0.0	7.4	52.1
UK	2.7	15.0	14.0	5.1	4.6	1.8	3.2	8.4	54.8
Ireland*	*1.7	14.9	14.6	4.3	4.5	2.2	5.7	9.7	55.9
Lithuania*	*0.0	5.9	23.7	5.1	5.9	*0.0	7.3	9.5	57.4
Finland	4.1	15.2	18.3	3.7	3.8	0.9	2.2	10.3	58.5
Greece	2.8	5.3	28.4	5.6	5.6	0.7	3.9	8.9	61.2
Romania	0.8	8.3	31.6	10.0	4.2	1.7	2.0	3.9	62.5

\* Unreliable or uncertain data

Source: Eurostat, 2005b

The UK and France count the highest amount of people with hidden impairments. In the UK the actual figure rises up to nearly 6 million, whereas in France, citizens with hidden impairments account for nearly 4 million. Countries with more than 1 million people experiencing illnesses that require special attention comprise Italy and the Netherlands.

Germany also counted more than 1 million people with hidden impairments in the severely impaired category (Statistisches Bundesamt, 2003a).

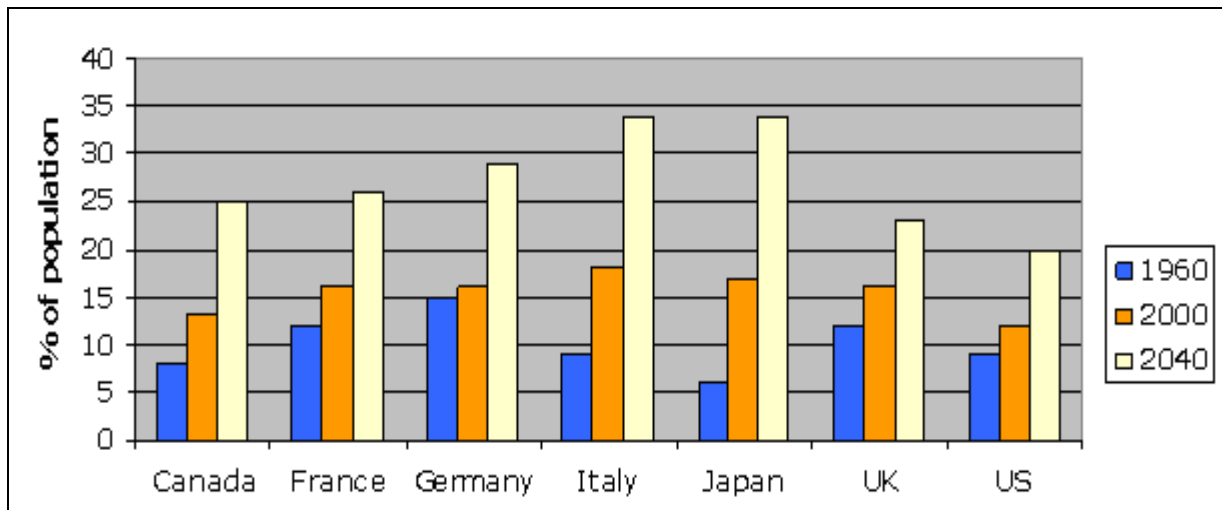
The distribution of types of impairments varies from country to country. All impairments have certain accessibility requirements ranging from low and moderate needs to high access requirements.

Having analysed that most LSHPD occur during the later years of life and that the elderly population has a variety of access requirements, the next section gives an account of the demographics of the elderly population in 25 European member states.

### 6.3.5 The Ageing Population

The ageing of the population is a worldwide phenomenon. By comparing a few selected countries (Figure 15) it becomes apparent that all countries will have a very high proportion of elderly people by 2040. In Italy and Japan, for example, 34% of the whole population will be 65 years and older in 2040.

**Figure 15: Percentage of population over 65 years (1960 – 2040)**

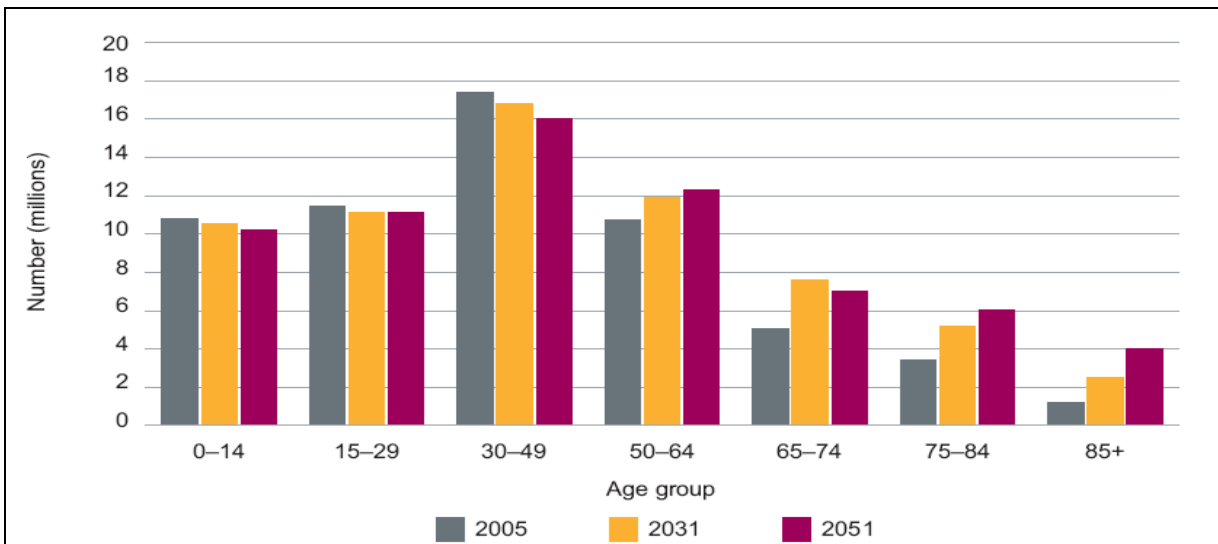


Source: OECD (2005)

Other sources also confirm similar predictions in the increase of the ageing population. According to the German National Institute for Statistics (Statistisches Bundesamt, 2003b), German citizens ageing 60 and over will rise from 24% in 2004 to 34% in 2030.

In the UK, people aged 65 and over are likely to represent over a quarter of the population after 2050. In addition, people that are now over 80 years represent only 2% of the population (Figure 16). However, by mid-century (2051) people over 80 years will account for nearly 4 in 10 persons of the population over 65 years. This will represent 6% of the total population (Opportunity Age Consultation, 2005).

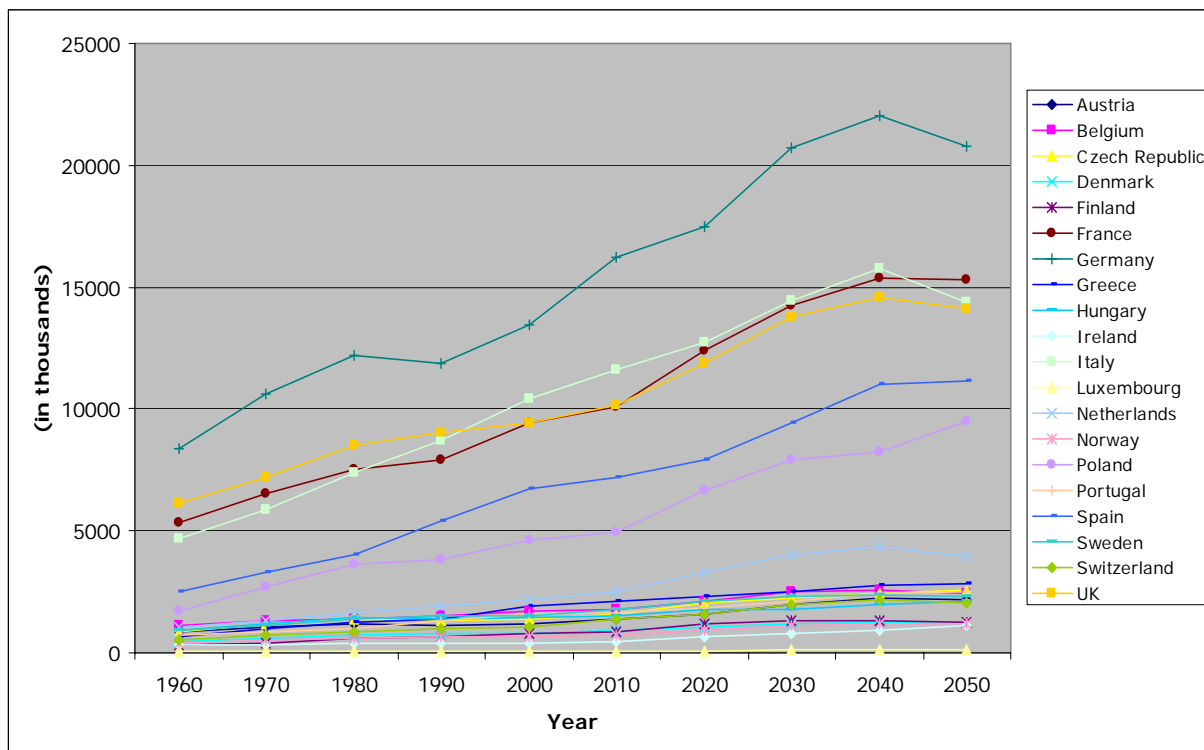
**Figure 16: Ageing in the UK (2005 – 2051)**



Source: Opportunity Age Consultation, 2005

By comparing ageing structures in some European countries from 1960 to 2040 (Figure 15), it has been estimated that Germany will have the highest number of elderly people in 2040 in Europe with more than 22 million, followed by Italy (15.7 million), France (15.4 million) and the UK (14.6 million).

**Figure 17: Ageing population in selected European countries (1960 – 2040)**



Source: Bloch, D. (2000)



The following table gives an overview of the current numbers of the elderly population aged over 65 in 2005 and the predictions for 2025. All 25 countries of the European Union will experience an increase in the elderly population during the next 20 years. Figures range from 11.6% (Latvia) to 83.3% (Malta). Countries with the highest elderly populations in 2025 will be Germany, France, Italy and the UK.

**Table 16: Ageing population in Europe 25 (2005 – 2025)**

European Union	Population > 65 in 2005 (in thousands)		Population > 65 in 2025 (in thousands)		Increase in percentage
	Population	%	Population	%	
Latvia	370	16.2	413	20.7	11.6
Estonia	224	16.8	261	22.7	16.5
Italy	11.289	19.4	13.896	24.7	23.1
Greece	2.007	18.8	2.473	23.2	23.2
Spain	7.103	17.6	9.003	22.7	26.7
Germany	15.577	18.9	19.815	24.6	27.2
Ireland	636	15.8	811	16.7	27.5
Lithuania	546	15.1	705	21.0	29.1
Portugal	1.802	17.1	2.330	21.6	29.3
Belgium	1.807	17.4	2.390	22.9	32.3
Hungary	1.507	15.1	2.009	21.3	33.3
United Kingdom	9.536	15.8	12.996	20.4	36.3
Sweden	1.568	17.4	2.158	23.2	37.6
Austria	1.357	16.6	1.876	22.9	38.2
France	9.962	16.4	13.980	22.2	40.3
Slovenia	309	15.4	454	23.8	46.9
Denmark	817	15.0	1.207	21.2	47.7
Luxembourg	68	14.5	104	17.7	52.9
Czech Republic	1.458	14.2	2.253	22.9	54.5
Finland	831	15.9	1.290	24.6	55.2
Poland	5.094	13.2	8.051	21.6	58.0
Netherlands	2.313	14.1	3.750	21.4	62.1
Slovakia	643	11.8	1.056	19.3	64.2
Cyprus	89	11.4	155	18.2	74.2
Malta	54	13.5	99	23.5	83.3
<b>TOTAL</b>	<b>76.967</b>		<b>103.535</b>		<b>34.5</b>

Source: U.S. Census Bureau, 2005

Looking at the total number of elderly people, the figure will rise by 34.5% from 77 million to more than 100 million in 2025. This increase will have a significant impact on both the leisure and health services that these people will require and it is anticipated that these industries will work together.

## 6.4 Market Size for Accessibility

In discussing the market size of accessibility, the focus should be placed on all types of disabilities shown above as well as on the all other groups that have accessibility requirements.

In particular, the elderly population represents an important market for accessibility. As disability increases greatly with age (Schmidt, 2004; Bloch, 2004; Gerlin, 2005), elderly people face more access barriers and have special requirements depending on the type of

impairment. Furthermore, elderly people will have more access requirements not only due to disabilities but also since the ageing process brings other health restrictions (European Disability Forum, 2001). Therefore, it can be argued that the whole elderly population has various levels of accessibility requirements, either since they experience impairments or long-standing health problems or they require access information for their general comfort and quality at this stage of life.

In addition to the disabled as well as elderly population, people of all ages and abilities benefit from accessibility, including a parent with a stroller, a person in a noisy shopping mall who cannot hear instructions at a kiosk, someone who has forgotten or misplaced their glasses, small child, a pregnant woman, a person who does not speak the local language and almost anyone.

Given the spectrum of people requiring accessibility, it can be seen that the market for accessibility is not homogenous but multifaceted and wide-ranging. The next section will identify some key requirements for people with special needs and will classify them from severe to mild.

#### ***6.4.1 Market Segments and Demand Types: The Continuum of Abilities***

Inclusive design and information provision does not only improve the accessibility and usability for people with disabilities but makes tourism in general more approachable for elderly people and a wider range of the population (Pühretmair, 2004).

Beneficiaries of a service providing information on accessibility include all citizens and in particular people with different types of impairments (impairment sub-markets) and the elderly population.

A service offering reliable information on accessibility supports thereby a variety of target customers. Some people might acquire a greater level of accessibility needs for a limited period of time (pregnancy, broken limbs, etc.), whereas others have accessibility requirements during their whole life. Everyone has specific individual requirements due to different abilities. Thus, it is a heterogeneous market which entails a series of different sub-markets.

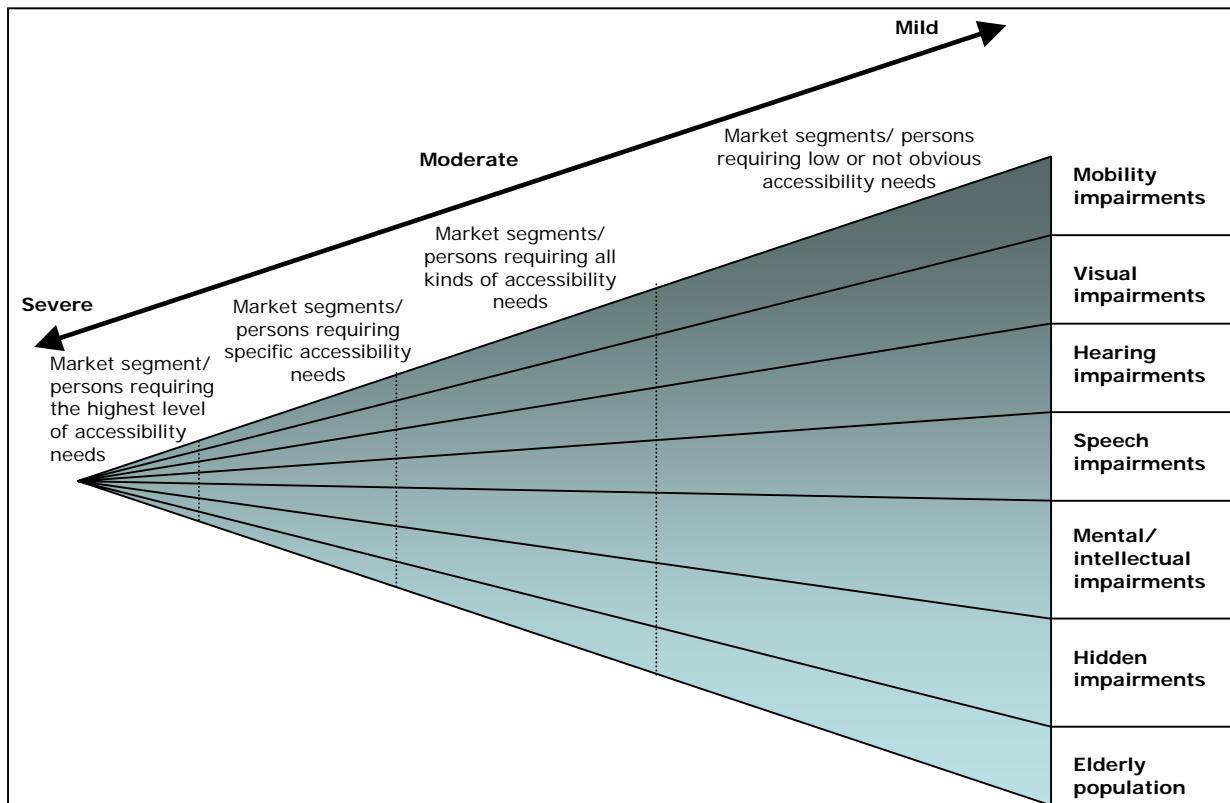
By looking specifically at people with impairments as well as the elderly population, 7 main clusters can be identified:

- 1) mobility impaired individuals (with varying levels of mobility)
- 2) blind or partially sighted individuals
- 3) deaf or partially hearing individuals
- 4) speech impaired individuals
- 5) mental/ intellectually impaired individuals
- 6) travellers with hidden individuals
- 7) elderly individuals (which often suffer from one or more of the above disabilities)

All these target customers might travel alone or in company of able-bodied assistants, friends or family member, illustrating the real market size for accessibility.

The following pyramid demonstrates key variations of demand types for the disabled and the elderly population that require accessibility. The elderly, who have low to moderate access needs, make up the vast majority of the whole range of those with any sort of access need. It is important to mention that all accessibility requirements represent a continuum. The demand types identified and illustrated have different level of requirements ranging from severe to low or mild.

**Figure 18: Pyramid of demand types: the continuum of abilities**



People with all kinds of access requirements represent a combination of challenges and opportunities for the travel and tourism industry. Serving these market segments requires considerable affords due to very different requirements and information needs.

Therefore, the need for inclusive design on the one hand and good market segmentation on the other can support organisations to deliver adequate tourism products and services to these groups. Dividing the market into distinct groups of people with similar needs and wants allows tourism planners and managers to understand what really matters for consumers and to create unique product offerings. By targeting these groups, they have the chance to achieve competitive advantages through differentiation.

Further, the establishment of well-defined demand types has profound implications in the marketing and positioning of destinations and organisations. The higher the access requirements, the more attention has to be paid to certain accessibility criteria. Individuals with the highest accessibility requirement might therefore be better served by specialised providers that have a profound knowledge of their high needs. Other people with more

moderate needs should be served by mainstream providers who have utilised inclusive design in their facilities.

This is mainly due to two reasons: First, many people who suffer from a temporary disability do not often see themselves in need of special services and hence purchase tourism products from mainstream providers. Secondly, disabled people with moderate or low access needs do not feel that they should be using specialised facilities that may stigmatise them and argue for an inclusive design and service. Increasing legislative and social responsibility will enable mainstream players to adapt their offering to all types and grades of disability.

#### ***6.4.2 Market Size: Estimations for European Countries***

Various authors and organisations estimated the prevalence of types of disabilities per country or at the European level. Toerisme Vlaanderen (2001) stated that there are around 35 million persons that have mobility impairments in the EU. They further estimated that around 1 million people were deaf, 80 million hard of hearing and around 12 million people experience no or low vision. According to Phillips (2002), wheelchair users account for around 5% of disabled people in the UK. This represents about 450,000 British citizens. Another 8.7 million are deaf or hard of hearing, an estimated 1.8 million blind or partially sighted, 18.000 people are regular Braille users and 400.000 people have a learning disability (Phillips, 2002; Disability Rights Commission, 2004).

In order to give a more comprehensive account on the market size per country and at the EU level, the report draws together the statistics per type of impairment (population aged 16 to 64) that have been identified earlier and the absolute number of the elderly population in 2005. It has been argued that elderly people have access requirements, whether these are high or not obvious.

Table 17 gives an overview of the market size for accessibility per country and per demand type related to impaired people and the elderly population.

Although this table gives a comprehensive view for some countries, it has not been possible to collect data sets for all countries. Some countries still do not provide this information or have different methods of collecting these statistics.

Based on the figures that could be obtained, the total market size for accessibility represents more than 127 million European citizens. This includes only the total disability population as well as the elderly population.

No statistical data is available for people under 16 years. However, it is assumed that this group accounts only for 2% to 5% of the total disabled population (Schmidt, 2004). Also, other citizens that require low or moderate access needs for comfort and quality as well as temporally impaired people that require higher levels of accessibility for a short period of time, such as people with a broken leg, families with children that have certain accessibility requirements are not included in this particular statistical account. Hence, the actual demand for accessibility in Europe is higher.

**Table 17: Market size per country and market segment (27 European countries)**

Country	Market segments (numbers given in thousands)								TOTAL demand for accessibility per country (in thousands)
	Mobility impaired	Visual impaired	People with deafness/hard of hearing	Speech impaired	Mental/intellectual impaired	People with hidden impairments	Total disability population incl. long-standing health problems (age: 16-64)	Elderly population (> 65)	
Austria	353.6	23.4	17.8	5.0	36.9	271.9	708.6	1,357.0	2,065.6
Belgium	536.3	60.1	18.8	8.8	91.5	537.5	1,253.0	1,807.0	3,060.0
Cyprus	24.1	2.2	0.7	*0	6.5	*29.3	62.8	89.0	151.8
Czech Rep.	529.2	91.1	17.6	5.9	58.8	*765.9	1,468.5	1,458.0	2,926.5
Denmark	321.0	15.0	12.9	*2.9	64.4	298.2	714.4	817.0	1,531.4
Estonia	77.3	14.8	*0	*0	11.6	*98.4	202.1	224.0	426.1
Finland	362.7	15.7	11.2	*0	59.5	657.0	1,106.1	831.0	1,937.1
France	3,764.0	943.4	252.9	48.6	885.1	3,832.0	9,726.0	9,962.0	19,688.0
Germany	**1,124.4	**109.5	**136.6	**4.3	**731.5	**1,373.8	***6,161.0	15,577.0	21,738.0
Greece	166.6	38.2	7.3	*4.4	67.2	449.2	732.9	2,007.0	2,739.9
Hungary	242.4	14.1	7.8	*3.1	107.1	*406.6	781.1	1,507.0	2,288.1
Ireland	81.9	5.1	6.0	*0	31.4	*172.2	296.6	636.0	932.6
Italy	981.5	89.5	43.5	17.9	263.3	1,155.3	2,551.0	11,289.0	13,840.0
Latvia	*0	*0	*0	*0	*0	*0	*0	370.0	370.0
Lithuania	*39.9	*0	*0	*0	30.2	*119.4	189.5	546.0	735.5
Luxembourg	19.4	2.1	*0	*0	*1.4	*12.1	35.0	68.0	103.0
Malta	*8.4	*0	*0	*0	*3.1	*8.5	20.0	54.0	74.0
Netherlands	1,284.5	56.5	53.6	14.1	285.1	1,019.1	2,712.9	2,313.0	5,025.9
Norway	238.1	18.3	16.8	*1.5	52.0	*115.3	442.0	681.0	1,123.0
Poland	*0	*0	*0	*0	*0	*0	*0	5,094.0	5,094.0
Portugal	546.7	77.5	19.7	*0	183.2	573.5	1,400.6	1,802.0	3,202.6
Romania	202.7	26.1	9.0	8.1	92.8	563.1	901.8	3,255.0	4,156.8
Slovakia	125.5	8.2	4.8	*0	29.5	145.5	313.5	643.0	956.5
Slovenia	117.4	9.4	*3.3	*0	14.7	*132.1	276.9	309.0	585.9
Spain	932.9	83.5	40.6	11.9	365.1	952.0	2,386.0	7,103.0	9,489.0
Sweden	500.9	21.1	42.2	*0	96.2	507.9	1,168.3	1,568.0	2,736.3
UK	3,486.7	185.8	262.3	109.3	950.9	5,989.6	10,984.6	9,536.0	20,520.6
<b>Total demand for accessibility per type</b>	<b>16,068.1</b>	<b>1,910.6</b>	<b>985.4</b>	<b>245.8</b>	<b>4,519.0</b>	<b>20,185.4</b>	<b>***46,594.2</b>	<b>80,903.0</b>	<b>127,498.2</b>

\* Unreliable or uncertain data

\*\* The data given for Germany only refer to severe impairments and does not take into account mild to modest impairments. Also hidden impairments only refer to the most severe types of long-standing health problems. It is therefore expected that numbers for Germany are higher than stated.

\*\*\* Estimations for German disabled population including mild, moderate and severe impairments, using estimation by Eurostat (2003), see table 6

Source: Eurostat, 2005; Statistisches Bundesamt, 2003a; U.S. Census Bureau, 2005

Table 17 demonstrates that the population experiencing disabilities or long-standing health problems (aged 16-64) accounts for more than 46 million. Within this particular category, the highest number of people having accessibility requirements is to be found in the categories of hidden impairments and mobility impairments, followed by the market segment comprising visual impaired citizens. Speech impaired people count for approximately 250,000 in Europe.

Countries that have the highest population in terms of the demand for accessibility arising from impairments and the elderly population are naturally the larger countries in Europe including Germany, the United Kingdom, followed by France, Italy and Spain. By relating the numbers of the total demand of accessibility per country to the total population in each country, it is noticeable that an average of 25% of the population in each country has unquestionably accessibility requirements.

Table 18 shows the absolute numbers for the demand for accessibility per country and the percentage of each population having varying accessibility requirements. Countries that have almost one third of the population with accessibility requirements comprise Finland, the UK, France, Estonia, the Netherlands, Sweden and Portugal.

**Table 18: Percentage of population requiring accessibility (27 European countries)**

Country	Demand for accessibility per country	% of total population	Country	Demand for accessibility per country	% of total population	Country	Demand for accessibility per country	% of total population
Poland**	5,094.0	13.2	Ireland*	932.6	23.2	Slovenia*	585.9	29.1
Latvia**	370.0	16.2	Spain	9,489.0	23.5	Belgium	3,060.0	29.5
Slovakia	956.5	17.6	Italy	13,840.0	23.8	Portugal	3,202.6	30.3
Malta*	74.0	18.6	Norway*	1,123.0	24.5	Sweden	2,736.3	30.4
Romania	4,156.8	18.6	Austria	2,065.6	25.2	Netherlands	5,025.9	30.6
Cyprus*	151.2	19.4	Greece*	2,739.9	25.7	Estonia*	426.1	32.0
Lithuania*	735.5	20.4	Germany***	21,738.3	26.3	France	19,688.0	32.6
Luxembourg*	103.0	22.0	Denmark*	1,531.4	28.2	UK	20,520.6	34.0
Hungary*	2,288.1	22.9	Czech R.*	2,926.5	28.6	Finland*	1,937.1	37.1

\* Includes unreliable data for some types of impairments

\*\* No data on types of impairments

\*\*\* Estimations for German disabled population including mild, moderate and severe impairments, using estimation by Eurostat (2003), see table 6.

Source: Eurostat, 2005; Statistisches Bundesamt, 2003a; U.S. Census Bureau, 2005

The accessibility market is often described as a niche market. However, considering the fact that the majority of European countries have a population ranging between 20% and 37% with explicit accessibility requirements, it becomes obvious that there is an enormous market for accessible products and services in all countries.

## 6.5 Specific Travel Patterns of Disabled Customers

Identifying travel patterns of disabled customers, including consumers' needs, preferences, requirements and quality expectations are very important so that tourism products and services can be developed to target these market segments accordingly. Further, an estimation of the market potential in terms of revenues to be accrued by serving the accessibility market will encourage tourism players to diversify their tourism products and services to target market segments requiring accessibility at all levels.

To date no confirmed statistical data exists for travellers with disabilities in Europe. For this reason, specific travel patterns of disabled people are identified using case studies of

various countries. Studies are usually based on estimates and a limited number of random empirical surveys.

### 6.5.1 Travel Motivations

Travel motivations are an important part of the travel process and occur before the actual travel planning. At this stage potential customers weigh the benefits gained from travelling against the costs and perceived risks associated with it. If the risks are perceived as low or manageable, they move on to the analysis stage of gathering travel related information (Kwai-sang Yau et al., 2004).

A study of visual, hearing and mobility impaired people conducted in the UK by NOP Consumer (2003) revealed that all respondents would like to go on holidays despite existing barriers. For those with children, the main motivation was the pleasure of a family holiday and to give children new experiences. For adults, the main reason was the desire to travel and new experiences.

A study by Shaw & Coles (2004), revealed similar findings for disabled travellers in the UK, identifying the main motivations for travelling as rest, relaxation, the feeling of freedom and the experience of visiting new places. These factors are similar to the able-bodied. However a stronger emphasis was given to rest and relaxation by disabled customers.

In Germany, a study of the BMWA (2004) compared the main motivations for travelling between travellers with a disability with the overall German population (Table 19). Again in this case, only little differences have been found between the two groups. Both groups cited relaxing, de-stressing and pressure relief as their main motivations for taking holidays. For travellers with activity limitations, additional basic motivations also included the desire for a warmer climate, health improvement and the wish to experience nature. The health aspect plays a far greater role for travellers with disabilities than for the average German population.

**Table 19: Motivations for German disabled travellers**

TOP	Travellers with disability	Overall German population
1	Relaxing/ de-stressing/ pressure relief	Relaxing/ de-stressing/ pressure relief
2	Healthy climate	Freedom/ leisure time
3	Improving one's health	Getting away from it all
4	Recharging batteries	Recharging batteries
5	Experiencing nature	Sun/ warmth/ good weather

Source: BMWA, 2004

Reasons for elderly people to go on holiday include rest and relaxation, opportunities for social interaction, physical exercise, learning, excitement, exposure to new situations and escape from daily life (Burnett & Bender Baker, 2001; Wang et al., 2005).

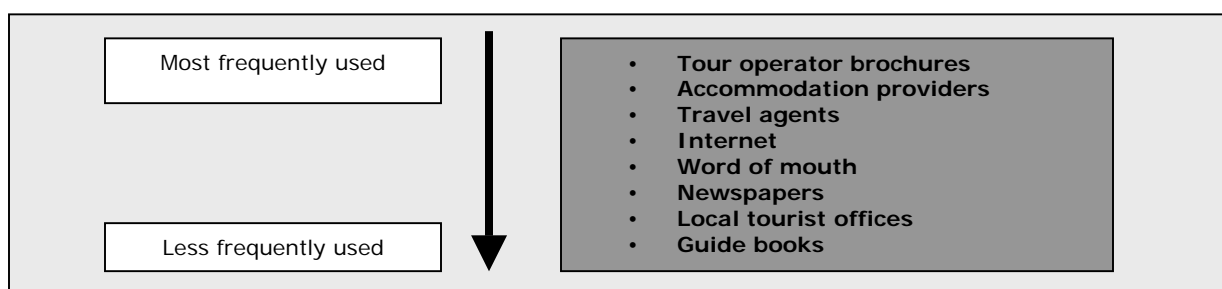
Once the underlying motivations for travelling have been perceived to be stronger than the perceived risks with regard to individual impairments, the travel analysis stage begins, where potential customers search for information. At this stage, the process changes from tourism as an abstract concept to resolving the practical concerns that accompany a holiday travel. If the analysis of travel practicalities reveals too many burdens and barriers, potential customers might still abandon the idea of taking holidays (Kwai-sang Yau et al., 2004).

## 6.5.2 Travel Planning

According to Epstein (1998) and Cavinato and Cuckovich (1992), there are three key decision paths for planning and booking holidays for travellers with disabilities. Some travellers with disabilities conduct their bookings through a regular travel agent while others book through a specialised agency for disabled people. The last option refers to the independent organisation of a holiday trip through guides or the Internet. It is not yet known what percentage of travellers with disabilities uses each option.

A study conducted by Pomona (2004) investigated the information sources used by British disabled travellers for planning a holiday. Figure 19 illustrates the variety of sources used to plan a holiday trip according to the frequency of every source. Most frequently used are mainstream channels such as brochures from tour operators and travel agencies, accommodation suppliers and the internet.

**Figure 19: UK: Information sources used to plan a holiday**



Source: Pomona, 2004

Similar findings that show that disabled customers in the UK use different sources for the search of travel related information is given by a study of NOP Consumer (2003). According to their findings, UK disabled customers follow a multi-stage approach where a variety of sources is used.

Within the first travel stage, disabled customers either search the internet to obtain destination as well as accommodation information or collect brochures from travel agencies or articles from newspapers or magazines. After getting a broad idea of the products and services they want, they seek advice from trusted disability organisations as well as from local tourist offices. Within the last planning travel stage the customer checks all accessibility issues directly with tourism suppliers at the destination to ensure the accuracy of the information. In some cases they also ask for a written confirmation of the provision of facilities before the actual booking is made (NOP Consumer, 2003).

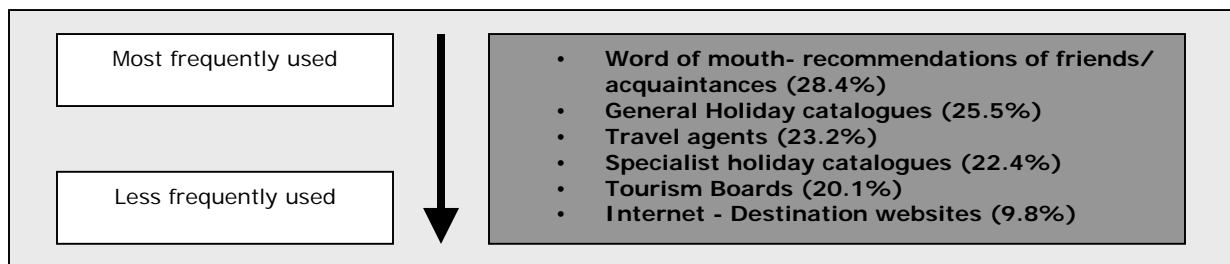
The reason for following a multi-stage planning approach was that the quality of information given in single sources is usually regarded as insufficient and only partially accurate. It has been reported that particularly accommodation providers usually overstate the available facilities in terms of accessibility to increase their marketing scope (NOP Consumer, 2003). Many disabled customers do not trust the information that is provided by tourism suppliers that they do not know or are unfamiliar to them and their needs. Trust in the information is a key factor that strongly determines the travel decision-making process (Toerism Vlaanderen, 2001; Darcy and Daruwalla, 1999).

By looking at the information sources used by German disabled customers (Figure 20), a study by the BMWA (2004) has found that word of mouth from fellow disabled travellers is



the most important source in terms of information gathering, followed by mainstream channels such as general holiday catalogues and travel agents.

**Figure 20: Germany: Ranking of information sources used to plan a holiday**



Source: BMWA, 2004

Regarding the actual booking process, findings of the BMWA (2004) revealed that 29.1% of Germany's disabled customers tend to book package deals for a holiday and around 13.0% for short breaks from travel agencies if the information gathering process has been successful and reliable information has been found.

For those who declared that no reliable or appropriate information on accessible facilities, equipment or services could be found, they decided not to travel. In the study of the BMWA (2004), this group represented 37% of the sample. About 48% have stated that they would travel more frequently if more accessible services were available (BMWA, 2004).

The planning process of German and British disabled customers shows some differences in the search for information applied. Whereas UK disabled travellers used the internet to a great extent, German disabled travellers used the internet for only 9.8%. Looking at the overall German population, 56% of the population uses the internet as a source for information (New Media Review, 2005). Based on these findings it can be assumed that either most of the travel related websites are not accessible or do not provide the relevant information to the disabled customer group in the language they require. A study carried out by the Institute for Futures Studies and Technology Assessment (2003) supports this viewpoint. In a ranking of an accessibility evaluation of 15 National tourism websites, the German results were to be found at the second lowest level of compliance with level 1 of the Web Content Accessibility Guidelines (WCAG) (Pühretmair, 2004).

Similarities in the planning and booking process could be found in terms of using mainstream channels such as travel agencies and tour operators by both customer groups in Germany and in the United Kingdom.

By looking at travel agencies for planning and booking holidays in New South Wales in Australia, a study conducted by Darcy (1998a) found that 45% of disabled customer that conducted their booking with regular travel agencies, reported that most of the information given has been incorrect, misleading and not reliable. However, when the information has been correct and corresponded to the needs of the disabled travellers, customers stayed loyal to this particular travel agency for a long time (Turco et al., 1998).

In America, the internet is an important source for adults with disabilities when planning a holiday. Half of the travellers (51%) use the internet to book their trips and almost a half of those who travel stated that they consult the internet to support their disability-related travel needs. For these travellers, the major use of the internet is gained in terms of

finding and/ or booking accessible hotels (57%), finding accessibility information about airlines (47%) and finding accessible activities, tours and attractions at their destination (47%) (ODO, 2005).

Disabled customers use different sources for gathering travel-related information. Sources that are used to plan and book holidays also differ from country to country. However, not only country specific differences can be found in the planning process, but also different search mechanism according to the type of impairment. Ray and Ryder (2003) found that particularly among people with mobility impairment in America the reliance upon informal sources was extremely high. Travellers in wheelchairs use personal experiences of friends and family as the key base for decision-making in conjunction with the internet and specialized travel guides. Also focusing on different types of impairments, a study by Shaw & Coles (2004) showed that people with mobility impairments in the UK tend to organise their trips individually (in some cases with the help of a family member), whereas people with other disabilities tend to organise their holidays by making use of mainstream channels. Similar findings have been gained by the BMWA (2004), reporting that the majority of German wheelchair users tend to organize their holidays independently, that reduces the dependency on tour operators to some extent, whereas people with chronic disease, visually impaired people and people with mental disabilities tend to use mainstream channels such as travel agencies (BMWA, 2004).

Therefore it is important to stress that travel planning generally varies greatly depending on the type of impairment.

Various studies and organisations have investigated the requirements that have to be fulfilled in order to deliver trusted information on accessibility for all types of impairments (NOP, 2003; BMWA, 2004; Toerism Vlaanderen, 2001; Darcy and Daruwalla, 1999). Their findings can be summarised as follows:

First, the provision of accessibility information needs to be established via respected disability organisations because these organizations have a trusted perspective on accessibility. The checking of disabled facilities needs to be done by an independent authoritative body. Any information on accessibility should provide clear descriptions on the criteria that have lead to any kind of accreditation (NOP, 2003).

Secondly, respondents stressed that all accessibility information given by disability organisations must also be included into mainstream holiday booking channels to avoid stigmas of high costs and segregation associated with specifically disability-oriented channels (NOP, 2003).

The third requirement is the need to include experiences and testimonials from others who have visited the destination, hotel, etc. before. Based on the strong power of the "word of mouth" technique in receiving travel-related information, there is a need to include testimonials from people with disabilities for every service to be established. Disabled people tend to trust specific recommendations given by other people with similar impairments (NOP, 2003).

Lastly, the internet is regarded as an ideal source for potential customers to find very detailed, reliable and up to date information since printed material of specialised travel guides is often not accurate enough or out of date. Further, the internet provides opportunities to reduce and simplify the search procedure. Therefore, the use of the internet represents an appropriate and dynamic source of information. Like all other sources, the data given within this medium has to be correct and reliable for customers to trust the information that has been provided (NOP Consumer, 2003; Toerisme Vlaanderen,

2001; Darcy and Daruwalla, 1999). Further, the information given on the internet has to be accessible for all users.

Opening travel opportunities (information & booking) to individuals with disabilities is a complex task since the ways of seeking information does not only differ from disability to disability but also from country to country. Due to the fact that tourists with different disabilities gather information from a variety of sources and conduct their bookings in different ways, the dissemination of high-quality, truthful and detailed information should be based on various distribution channels to address the market in an effective manner. The internet is regarded as an ideal source to provide this information. Further, any information for disabled customers should also be included in mainstream channels as many respondents in the case studies shown above indicated that they do not like to be seen as dependent or passive recipients of specialised services or a niche disability submarket.

The adequate provision of information is crucial for customers to decide whether to go on holiday or not. If disabled customers are confronted with a variety of barriers in the travel planning process, they are likely to abandon the idea of holiday taking. Consequently, tourism suppliers fail to attract these market segments and lose significant profitable opportunities.

### ***6.5.3 Travel Intensity and Frequency***

Travel intensity is strongly related to existing barriers that are experienced by disabled customers in order to participate in the travel and tourism activities. It refers to the percentage of the total disabled population that go on holidays. The group that remains outside the travel market is likely to have permanently abandoned the idea of holiday taking due to existing barriers (BMW, 2004). Findings from various case studies suggest that persons with disabilities face a number of barriers that prevent them from going on holiday, such as environmental, interactive as well as intrinsic barriers (Kwai-sang Yau et al., 2004; Wang et al., 2005).

In the last few decades, gradual progress has been made in removing barriers so that today the transport, accommodation and attraction sectors are more accessible than they have been before. In the UK, this is mainly because of the Disability Discrimination Act (DDA). Since 1995 it requires tourism suppliers to make adequate provision for disabled access. Furthermore, new buildings only gain planning permission if they provide facilities for the disabled (Stumbo & Pegg, 2005; Shaw & Coles, 2004; Shaw, Veitch & Coles, 2005; Philips, 2002). Yet, a disproportionately small number of people with disabilities participate fully in mainstream tourism (Darcy, 1998a).

Findings about the travel intensity of German disabled travellers provide some important insights into these travel patterns. BMW (2003) revealed that the travel intensity of people with disabilities is below the overall German population. German disabled customers have a travel intensity of 54.3% for taking holidays. This is considerably below the 75.3% of the overall German population. Regarding travel intensity in terms of short and weekend breaks, however, there is only a small difference between the average population (37.5%) and persons with disabilities (32.2%) (BMW, 2003). Based on these findings it can be extrapolated that many disabled people effectively stay outside of travel experiences due to perceived or real accessibility barriers. Respondents of the sample of the BMW (2003) explained their absence of holiday taking by a lack of accessible products and services available.

In contrast to travel intensity, travel frequency investigates how often disabled travellers undertake journeys for holiday purposes (BMW, 2004).

Generally, it was found that the differing propensities to travel of Europe's various nationalities were reflected in the frequencies of travel by their citizens with disabilities. This means that if one country has a high frequency of citizens travelling then the percentage of people with disabilities in the same country going on holidays is also higher in comparison to other countries (van Horn, 2002).

This view is supported by Neumann (2002) reporting that scientific studies in Germany have shown that the travel frequency of people with disabilities is practically identical with the travel frequency of the overall German population. On average, persons with disabilities take an average of 1.3 holidays and 2.3 short breaks a year (BMW, 2004).

The Open Doors Organization (ODO, 2005) stated that adults with disabilities in the United States take 2 holiday trips every two years. These account for approximately 63 million total trips. As reported in 2002 (ODO, 2002), there continues to be a subgroup of more frequent travellers in the disability community (20% of all adults with disabilities) that travel at least 6 times every two years.

Therefore it is recognisable that disabled travellers do not travel less and represent an attractive target group. Further it has to be taken into account that much has to be done to reduce existing barriers so that potential travellers that still remain outside of the travel market can fully participate in tourism experiences.

#### **6.5.4 Travel Companions**

As outlined in section 6.1, an average of 59% of European citizens have a family member with a disability and 38% of Europeans have a friend that has at least one impairment (Eurobarometer, 2001). Country specific case studies support these findings. In Germany and Belgium around 50% of the disabled population in each country is either accompanied by a family member or a friend when travelling (Declercq, 2004; BMW, 2004).

For any consideration regarding the market potential of disabled travellers, it is essential to take into account their travel companions, as they are likely to accompany disabled partners or friends. This in turn will have an important economic impact in terms of the multiplier effect on the overall travel expenditure. An expected multiplier effect of 2 is estimated given travel companions and frequency of travelling. Consequently, organisations and destinations that cannot accommodate the needs of people with disabilities will also lose the business of their friends and family members.

#### **6.5.5 Travel Destinations**

Disabled travellers want to see the world like everyone else, but countries where they can safely or comfortably go at present are rather limited. Of course, this does not stop the more adventurous, but it definitely holds back the average traveller with a disability and therefore limits the growth of the market.

According to Shaw & Coles (2004), the chosen destinations by British disabled travellers tend to be domestic-based, despite information provided by specialized operators aiming specifically at foreign destinations for the disabled market.

British mobility impaired travellers chose a wide range of destinations including UK destinations such as the Blackpool, Devon & Cornwall, South Coast, Scotland, Wales, Cheshire, Yorkshire and Scarborough but also overseas destinations comprising Ireland, USA, Spain, Greece and Holland. For people suffering a total loss of sight the destinations remained UK based, whereas people with other sensory impairments chose overseas destinations as well, depending on their budget. However, the majority of holidays were still UK based (NOP Consumer, 2003).

Similar findings regarding the prevalence of national destinations can be found in Germany, where 42.2% of the German disabled population chose regions within Germany for their vacations in comparison to only 30.5% of the overall German population. The figure is even higher for short breaks where 80.0% of German disabled travellers stayed in their country (BMWVA, 2004). This view is supported by Neumann (2002), who found that the frequency of travelling by disabled customers in domestic countries is clearly above average.

A study by Declercq (2004) reported that the majority of Belgian mobility impaired citizens remained at the Belgium coast for their holidays. Overseas destinations included neighbouring countries such as France and the Netherlands.

The reasons for staying in domestic destinations can be explained by a lack of information regarding other destinations, language barriers, perceived less risk, medical resources and the ease by which certain destinations can be reached.

As reported by the ODO (2005), three out of five adults with disabilities who are online (62%) have travelled outside the continental United States at least once in their lifetime. More than two out of five of those tourists have travelled to Europe (44%). The most visited countries in Europe are Germany (28%), Great Britain (26%) and France (25%). Summarising, it can be said, that by providing more information on foreign destinations, tourist planners will be able to attract a large customer segment that previously stayed in domestic countries for holidays. According to van Horn (2002) and Philips (2002), travellers with disabilities are more loyal to destinations in comparison to their able-bodied counterparts. They usually return again to the same destination, once it was established as accessible and welcoming. This will have an important effect on the economic profitability of tourism enterprises.

### ***6.5.6 Travel Duration & Seasonality***

Once they have chosen a destination, disabled travellers tend to make use of the low season for their holidays to avoid crowded places. They further tend to stay longer than able-bodied (van Horn, 2002).

In Germany, only a slight difference can be found between the travel duration for disabled customers (13.9 days) and the overall German population (13.5 days). However significantly, the disabled population tends to go on holidays in the low season (May, September and October) for both, holidays and short weekend breaks, whereas the overall German population chooses the months of June, July and August for their vacations (BMWVA, 2004). This is because many disabled travellers are not dependent on school/ public holidays and in many cases, the climate in these months is more favourable to them.

The travel duration of Belgian mobility impaired travellers ranges from 1 to 30 days. The average number of overnight comprises 7 nights, half of the time German disabled travellers spend on holidays (Declercq, 2004).

A study conducted in the UK revealed that the travel duration of disabled UK travellers varies from 1 to 14 nights with the majority of travellers staying for 4 nights (Shaw & Coles, 2004).

As could be seen from the examples given, the travel duration by disabled travellers varies greatly from country to country. This has important implications for the market potential as it has to be taken into account that the higher the numbers of nights spent at any given destination, the greater the implications for the travel spending by disabled customers.

### ***6.5.7 Travel Spending***

Over the last decade, much has been said about the commercial aspect of welcoming disabled customers. Research dispels the myth that persons with disabilities are poor. Contrary to most beliefs, disabled travellers tend to spend more per day than able-bodied visitors. Consequently, there is considerable spending power within this market (Horgan-Jones & Ringaert, 2004; van Horn, 2002). Some disabled people have lower disposable incomes. However, they save more to spend on holidays.

In the United States, for example, adults with disabilities spend \$13.6 billion on travel each year (ODO, 2005). The Open Door Organization reported further that over the course of two years, 16% of online adults with disabilities that travelled outside the continental United States spend almost \$1,600 on this travel. This means that current international travel expenditure exceeds \$7 billion over the course of two years (ODO, 2005).

In 1993, the management consultants Deloitte Touche published a study, which was entitled "Profiting from Opportunities" and identified a potential additional spending of nearly £17 billion from disabled people in Europe if suitable facilities were provided and if they were marketed consistently (Disability Rights Task Force, 1999).

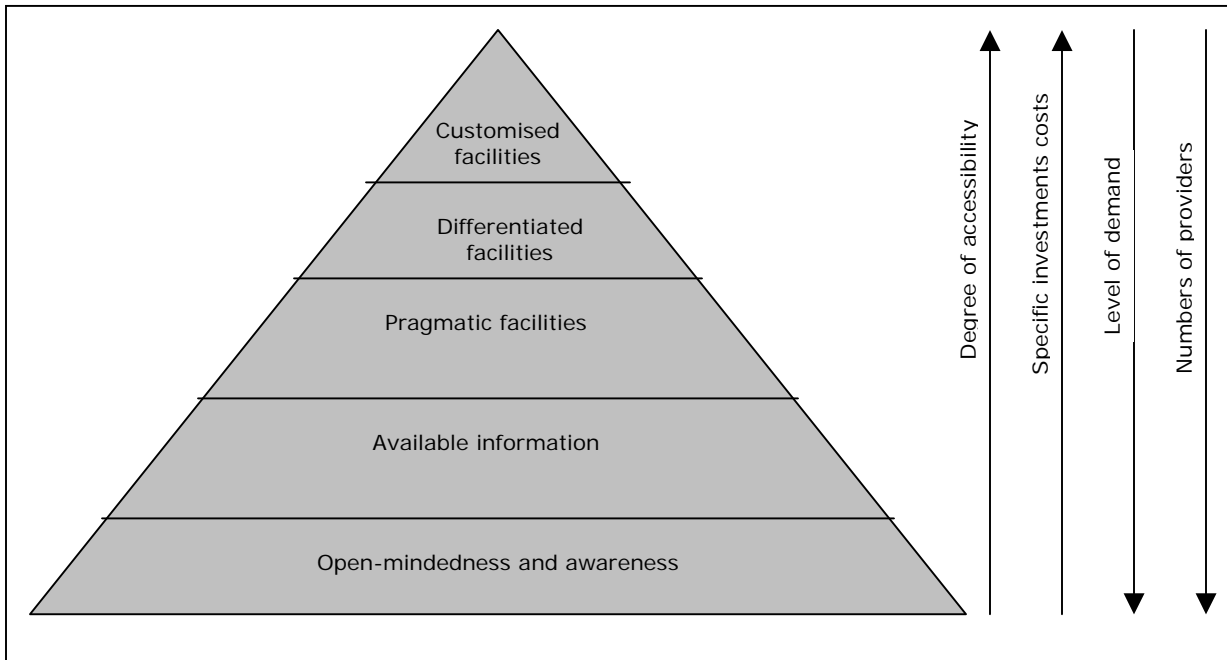
Looking at travel spending patterns in Germany as an example, it is noticeable that the market potential of serving the disabled customers market is very lucrative. A study by the Federal Ministry of Economic and Labour (BMWA, 2004) found that the average travel spending per head totals €818 for the general German population. In comparison, travellers with disabilities spend €945 per holiday per head. Further, it is remarkable that disabled citizens in Germany would be willing to pay between 100 up to 2000 Euro more for suitable tourism products and services (BMWA, 2004). Although it is unfair that disabled persons often need to pay more for facilities they often currently have no alternative than to pay for premium properties and facilities.

Having argued earlier that more than 5.6 million disabled people in Germany remain effectively outside of the travel and holiday market due to real or perceived accessibility problems and assuming that at least half of these people have both the financial or physical possibilities to go on holidays, the loss of potential tourism revenues is calculated to be more than 2.6 billion Euro.

The study of the BMWA (2003) gives some further indications of expected revenues of disabled travellers in Germany by improving accessible products and services as well as their provision. Using a pyramid showing different levels of accessibility offers, information

provision and awareness (Figure 21), it has been argued that although the top end of specialised tourist products for high accessibility requirements would provide additional income, the highest revenues are expected to occur at the two lowest levels. This can be explained by the fact that even minor adjustments by tourism suppliers in the information provision as well as in minor improvements in the building can considerably increase a business' profitability. By using estimates, it has been shown that by improving all levels an additional turnover of 6.2 billion Euro can be expected to benefit the entire tourism industry (BMWA, 2003; Waschke, 2004).

**Figure 21: Levels of accessibility offers, information and awareness**



Source: BMWA, 2003

In order to improve all levels with regard to accessibility offers, the involvement of both government and industry partners is needed and includes specialized and mainstream actors to serve customers from each end of the pyramid. Hereby the aim is the creation of accessibility services for all people (of any age and various levels of ability) that inherently improves the quality of life for everyone. This concept recognizes that people have a range of capabilities and needs that have to be catered for.

Looking at the travel spending of elderly people, the European Travel Commission (ETC, 2004) stated that seniors will have higher disposable income than in the past. Many of them will enjoy early retirement schemes (ETC, 2004).

Given the fact that elderly people will spend a greater percentage of this discretionary income on travel, a higher percentage than any other market segment, tourism suppliers should deliver services reflecting the needs of these changing demographics, both in the private and in the public sector (Horgan-Jones & Ringaert, 2004).

## 6.6 Market Potential by Serving the Accessibility Market

Having elaborated on specific travel patterns of disabled people, the actual market potential in terms of the benefits to be accrued by the tourism industry when serving this market, can be identified. The total demand for accessibility focusing on 7 segments for impaired citizens and the elderly population, as outlined in section 6.4.1, forms the basis for calculating the market potential. The market size for accessibility has been estimated to account for 127.5 million in Europe.

However, not all these citizens have both the economic and/ or physical ability to travel. Some citizens in Europe have reached a stage in their health status where travelling is not possible anymore since they are bed-ridden. Economic ability to travel refers to the financial situation to be able to afford going travelling. Deloitte Touche have estimated in their study "Tourism for All in Europe" that 70% of the Europeans with varying accessibility requirements have the economic and physical ability to travel (van Horn, 2002).

In addition to this, persons with disabilities seldom travel alone (section 6.5.4). Deloitte Touche found out that a multiplier effect of 0.5 for travel companions has to be taken into account (van Horn, 2002). According to the findings of 6.5.4, an even higher multiplier effect of 2 can be expected.

If a multiplier effect of 0.5 is assumed, meaning that half of the population with accessibility requirements will have at least one person travelling with them once a year, the potential travel market accounts for 134 million with expected revenues of more than 83 billion Euros.

Recapitulating the findings and assumptions of previous chapters, a multiplier effect of around 2 can be proposed. On average 59% of European families have a disabled member and an average of 38% of the European population has a friend experiencing a disability (Eurobarometer, 2001). Further disabled people take more than 1 holiday per year on average, travel with more family members or friends and would travel even more if they would find more information and better accessible sites. If a multiplier effect of 2 is accepted, the potential travel market would rise up to over 260 million, with expected tourism revenues of 166 billion Euros. The following table shows the calculations for both multiplier effects.

**Table 20: Potential travel market and tourism revenues**

General demand for accessibility	70% that have the economical and physical ability to travel	Multiplier effect for friends & family members	Accompanying friends and family	TOTAL potential travel market	Average expenditure per person per holiday*	Potential tourism revenues
127.5 million	89.3 million	0.5	44.7 million	134 million	€ 620	83 billion Euro
		2	178.6 million	267.9 million		166 billion Euro

\* The average holiday expenditure in the EU was 620 euro in 2003 (Eurostat, 2005a).

Potential tourism revenues ranging between 83 billion Euro and 166 billion Euro would increase sales in the European tourism sector from 249.2 billion Euro in 2003 (Eurostat, 2005a) to over 300 or 400 billion Euro respectively, with an estimated arrival number of approximately more than 500 million (401.5 million arrivals in 2003) (Eurostat, 2005a). This can boost the European travel market by more than 33% in terms of tourism arrivals.



In reality, these figures will even be higher due to two reasons. First, the calculations are based on the assumption that European citizens conduct their holidays in Europe. However, there are also tourists from all over the world which choose Europe as their holiday destination. By taking the global prevalence of disabilities into account, the total potential travel market worldwide ranges between 600 and over 900 million citizens. Secondly, this number only refers to people with impairments. Thus, as it has been argued throughout the report, everyone has accessibility requirements and this will have an effect on the general travel market seeking accessible design and consequently information on accessibility.

Potentially, this is a huge market and will continue to grow in size and economic power due to the ageing of populations. Some disabled people are already active travellers. However, as could be seen, many barriers still prevent potential other customers from travelling. It will depend on the tourism industry to respond to this potential with the development of a coherent strategy to adequately target this market.

## **6.7 Consequences for the Tourism Sector**

Persons with disabilities are citizens with full rights and as such have the same expectations and aspirations as the rest of their fellow citizens. Tourism is a social good in high demand by this group. Further, accessibility can no longer be referred to as a “niche market” of disabled people. More and more customers demand accessible tourism offerings independently of the level of accessibility they might require.

Accessibility is and will continue to be a key requirement for the elderly population. However it is important to stress that mature travellers often have hidden disabilities and do not identify themselves as disabled. Meeting their needs in a sensitive way is definitely a must for service providers. As a great percentage of the elderly population demand products, services and information in terms of accessibility, the customer base gradually shifts from being a niche market to the mainstream (Hompel, 2003).

Human and economic efforts to provide information on accessibility for tourism products and services mean actively participating in the creation of a quality future. This will result in growth for the tourism sector and will benefit society at large, particularly given the demographic ageing of the population. This means that accessibility requirements are not inherently related to the disability or elderly market but also comprise other citizens with lower or not obvious access requirements as well as anyone who appreciate comfort, ease and security. Therefore, the demand for accessibility can be extended to all citizens who appreciate quality and comfort, raising the requirement for inclusive design.

As the demand for accessibility will continue to expand well into this century, the tourism sector faces new trends and needs. While addressing this demand, a broad range of different market opportunities exist and represent a very valuable factor of competitiveness for tourism entrepreneurs with increasing revenues to be derived by those willing to understand and meet the particular needs of the accessibility market. Not only is the size of the accessibility requiring market important but also the fact that in particular disabled travellers are very loyal customers and often travel out of season, offering additional benefits to the industry.

It should therefore be the first priority of tourism planners to develop strategies to promote accessible tourism by taking into account the primary benefits sought by potential customers. The accessibility market will only become a profitable market for the tourism industry if it is properly positioned and subgroups within this segment are well-understood.

Despite the potential market size for accessible tourism, several problems can be identified that prevent the realization of the full potential of this market. These include existing inaccessible facilities, a lack of awareness by the tourism industry, lack of reliable and accurate information, lack of marketing and communication, unstructured local and national expertise on the subject as well as the absence of any great variety in accessible destinations.

While creating accessible services and facilities is obviously a key to serving the accessibility market in the widest possible sense, promoting these tourism products and services is even more critical. Information, so important to this travel segment, has historically been very hard to come by. The internet has been revolutionising the spread of access information. Anyone who is not providing accessibility related information on the internet is definitely missing a great share of the potential market. Tourism actors that should include information on accessibility are NTOs, RTOs, LTOs, governments and municipalities, hotels and other accommodation suppliers, providers of tourism sites and venues, transportation providers, tour operators and travel agents among many others.

A detailed analysis of the supply of information on accessibility as well as on accessible tourism products and services in European countries is given in chapter 7. Further, the stakeholder analysis identifies key stakeholder groups and explores their interest as well as constraints in providing accessible tourism destinations. The proportion of accessible tourism supply per country on a pan-European level, in contrast to total tourism supply, is also investigated.

## **6.8 Summary: Market Size for Accessibility**

Chapter 6 focused on investigating the demand for accessibility and identified the potential travel market and revenues to be accrued by the tourism industry when serving this market. Based on these findings, the consequences for the tourism sector were outlined.

- Absolute figures of the prevalence of disability are difficult to estimate due to a lack of standardised data and a lack of comprehensiveness.
- Worldwide it is estimated that there are between 600 and 859 million people with disabilities.
- In Europe, the total number of the population aged 16 to 64 with long-standing health problems or disabilities (LSHPD) is estimated to account for more than 45 million citizens.
- Prevalence figures of disabilities vary from country to country and also between types of impairments.

- To determine the market size of accessibility, the focus has to be placed on all types of impairments as well as on the all other groups that have accessibility requirements.
- In particular, the elderly population represents an important market for accessibility as disability and consequently access needs greatly increase with age.
- Given the spectrum of people requiring accessibility, it can be seen that the market for accessibility is not homogenous but multifaceted and wide-ranging.
- An overview of the market size for accessibility per country and per demand type related to impaired people and the elderly population only has revealed a general demand for accessibility accounting for more than 127 million citizens in Europe.
- Investigating specific travel patterns of disabled people has shown that most needs, preferences, requirements and quality expectations are similar to the able-bodied population. Differences exist only in the travel duration and travels spending as disabled people tend to stay longer than able-bodied and have a higher disposable income for holidays.
- In calculating the benefits to be accrued by the tourism industry when serving this market, the study took into account that around 70% of the general demand for accessibility has both the economic and physical abilities to travel and these usually travel with at least one travel companion.
- Thus, the potential travel market varies from 134 million to over 260 million, with expected tourism revenues ranging from 83 billion Euros to 166 billion Euros for European travellers alone.
- Since everyone has accessibility requirements, the actual figure of the population demanding accessible design and consequently information on accessibility is therefore expected to be higher.
- The consequences for the tourism sector can be outlined as: the need to improve the awareness of this market by the tourism industry, promote local and national expertise on the subject, understand and meet the needs of the accessibility requiring market, provide reliable and accurate information, enhance the marketing and communication of this information especially through the internet.

## **7. Stakeholders Analysis: Supply**

### **7.1 Review of Relevant Stakeholder Groups**

*“Stakeholders are all the persons or groups who have interests in the planning, process(es), delivery and/or outcomes of the tourism service” (Sautter & Leisen, 1999, p.315).*

The benefits of the OSSATE project, attempting to create a pan-European accessibility information e-service for the tourism sector, are twofold. On the one hand it is regarded as a highly attractive commercial proposition, and on the other hand, it conveys a significant social value for disabled and elderly citizens, who tend to be excluded from mainstream tourism services.

In particular it can help destinations to publicise their products and better serve the needs of 134 million people in Europe. Focus on improved accessibility will give a quality lift and greater flexibility of use for destinations, venues, facilities and accommodation providers. Better accessibility improves service levels for all, opens up new markets, stimulates more varied tourism offers, improves operational management and gives competitive advantage to providers. The e-Service will give regional and national accessible tourism information services greater reach – into Europe and beyond.

For all these benefits to be delivered to the different stakeholder groups, cooperation and formulation of strategic partnerships are essential prerequisites. Bringing the service into operation depends on the ability of the public sector actors to engage and work with a wide range of private sector and non governmental organisation stakeholders, who are culturally diverse and whose technical infrastructures and resources vary widely.

The OSSATE project seeks to support the competitiveness and sustainability of tourist venues by applying a common approach to the analysis and improvement of accessibility, by providing a digitalised, multi-lingual mechanism for sharing information about accessibility across geographical boundaries. Thus, the involvement of a wide range of stakeholders is considered crucial for the successful implementation and strategic development of the proposed service. Initially, expected interested parties would include:

- National public and local authorities, National and Regional Tourism Organisations
- Tourism Service Providers, venue owners, hoteliers, restaurants, museums etc.
- Tourism intermediaries, Associations of Tourism and Hospitality businesses
- European Tourism Commission
- Disability NGOs
- End users
- Accessibility device and product vendors and distributors
- Social partners (Employers, Trades Unions etc)
- Vocational Training Sector
- Added value service providers (Mobile Operators, ISPs, Interactive TV)
- Media, the Press
- Investors, financial institutions, private and public
- Corporate Buyers: companies and organisations buying tourist services, the vast majority of them being SMEs
- Professionals and Professional Associations: human resource managers, trainers, professional networks interested in professional development in accessible tourism

Still, the most distinct financial and social benefits will affect the following broad categories:

**Disability organisations and end users**, as they will be able to offer valuable, accurate and reliable information, assisting the travel search procedure for disabled citizens. Hence, the tourism products will be more accessible for them, enhancing the choice options according not only to type of disability, but to personal preferences as well.

**Destination related organisations and public authorities** (NTOs, LTBs, etc.), as this service will add value to the current services, providing a more wholistic overview of the destination and inclusive social service. Apart from capturing greater market share, destinations on local, regional or national level will be able to promote their diversity through the most exploited distribution channels. Electronically distributed information, via a platform designed upon the special needs of the niche market.

**Tourism service providers and tourism vendors** (Hoteliers, Caterers etc.), as the deployment of the service will open a new market numbering 600 to 900 million disabled people worldwide.

**Technology oriented companies**, as the project attempts to create a platform utilising multiple technologies (WAP, MMS, LBS, GPRS, XML, etc) which need to prove interoperable and operational in a timeline of less than two years. The building up of the platform itself entails many challenges as it should meet the special requirements of the particular users.

It is important to investigate what would be the major motives for them to finally engage to this project. In other words, what are the deficits in their current business models and where OSSATE could add value to their business processes (Table 21).

**Table 21: Target Group Anticipated Requirements for the OSSATE services**

	<b>Critical</b>	<b>Very Important</b>	<b>Important</b>
Disability NGOs, end users	<ul style="list-style-type: none"> <li>▪ Up to date accurate information on accessible destinations</li> <li>▪ Travel services promotions</li> <li>▪ On-demand services</li> <li>▪ Personalisation services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Benchmarking</li> <li>▪ Sharing experiences</li> <li>▪ Networking</li> </ul>	<ul style="list-style-type: none"> <li>▪ Special interest groups</li> </ul>
Destination Management Organisations and Public authorities	<ul style="list-style-type: none"> <li>▪ Up to date Accurate Information</li> <li>▪ Market Information</li> </ul>	<ul style="list-style-type: none"> <li>▪ User friendly admin tools</li> <li>▪ Benchmarking</li> <li>▪ LBS</li> </ul>	<ul style="list-style-type: none"> <li>▪ Implementation Models</li> </ul>
Tourist Service Providers and Tourism Vendors	<ul style="list-style-type: none"> <li>▪ User profile info (user requirements)</li> <li>▪ Networking</li> <li>▪ Market Information</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accessibility Standards, procedures</li> <li>▪ User friendly admin tools</li> </ul>	<ul style="list-style-type: none"> <li>▪ Procurement Guidelines</li> </ul>
Technology Oriented Companies (Mobile Network Operators, ISPs, Interactive TV Broadcasters)	<ul style="list-style-type: none"> <li>▪ Dissemination of product information (ad space)</li> <li>▪ Audience and market information</li> <li>▪ Ad space</li> <li>▪ Interfacing modules</li> </ul>	<ul style="list-style-type: none"> <li>▪ Networking with Investors and Providers</li> <li>▪ Lobbying and Influencing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Demo Space (virtual gallery)</li> <li>▪ Download Area</li> </ul>

## 7.2 Stakeholders' Interests & Constraints (aggregate level)

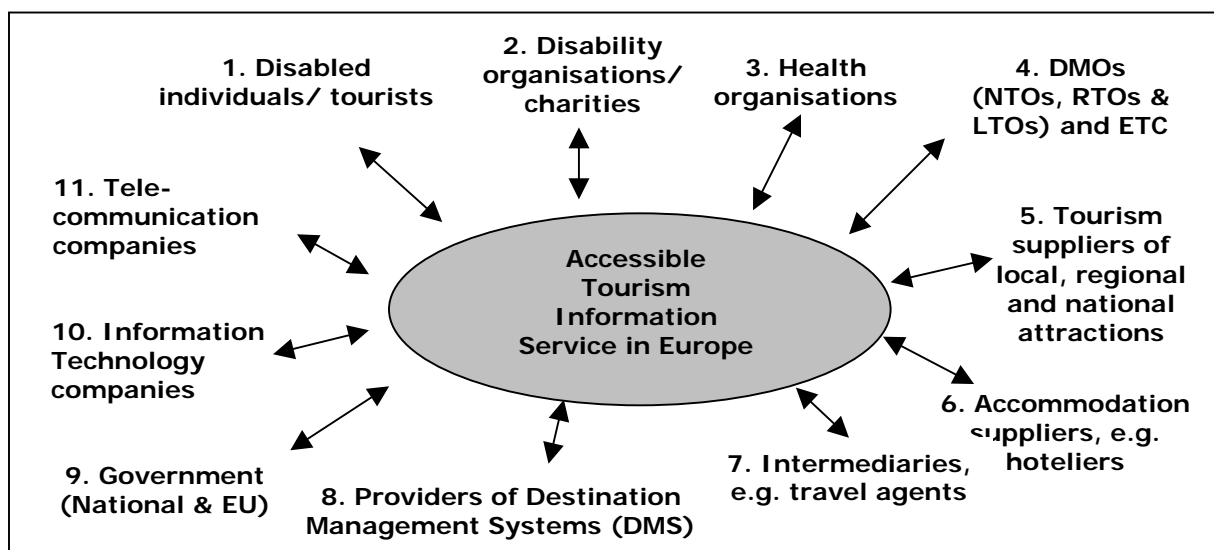
OSSATE aims to provide tailor-made solutions to the specific needs of the different stakeholder groups. However, there are a number of interests and constraints that implicate the engagement of these groups. Table 22 illustrates an analysis of these interests and constraints on an aggregated level, providing an overview of the extend of this implication.

In addition to the primary audiences, the OSSATE Portal will aim to serve also as a window on the results of the e-Accessibility and e-Tourism Initiatives for the European Commission in general, the European Parliament, for national and international agencies with an interest in this field, and for the general public of Internet users.

While the portal should provide a place for all of those, the task remains to define those who are the drivers of the portal and attract them first and rely on their potential to draw others into the portal and the other OSSATE e-services.

Based on the evaluation of the stakeholder review, 11 main groups of stakeholders evolved (Figure 22). These were identified as the ones demonstrating a potential strong interest in the provision of accessible tourism destinations in Europe.

**Figure 22: Stakeholder groups involved in the proposed e-service**



Source: Adapted from Sautter & Leisen (1999) & Buhalis (2000)

Table 22: Stakeholders' interests & constraints in the OSSATE service

**Interests:**

**Constraints:**

																	<b>Stakeholder groups:</b>								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	1	2	3	4	5	6	7	8	9
★	★																<b>Disabled individuals/ tourists</b>								
	★	★	★	★	★	★			★	○	○			★	★		<b>Disability organisations/ charities</b>								
	★	★	○	★	○												<b>Health organisations</b>								
	★	★	★	★	○	★	★	★	★	○	○			★	★		<b>DMOs (NTOs, RTOs &amp; LTOs)</b>								
			★	★		○	★	○	★	★	★	○	★	★	○		<b>Suppliers of local, regional and national attractions</b>								
			★	★		○	★	○	★	★	★	○	★	★	○		<b>Accommodation suppliers, e.g. hoteliers</b>								
	○	★	★	★	○	★	★	★	★	★	★	★	★	★	★		<b>Intermediaries, e.g. travel agents</b>								
	○	★	★	★	○	★	★	★	★	★	★	★	★	★	★	★	<b>Providers of Destination Management Systems</b>								
	★	★	★	★	○	★						★		★	★		<b>Government (National &amp; EU)</b>								
	○							○	★	★		★	★	★	★	★	<b>Information Technology Companies</b>								
							★	★	★	★	★	★	★	★	★	★	<b>Telecommunication companies</b>								

★ = applicable / ○ = partially applicable

<b>Interests:</b>										<b>Constraints:</b>															
1. Desire to travel for various reasons	2. Need to receive reliable information for travelling	3. Provide full range of services/ tourism products available at the destination to customer	4. Strengthen the destination's/ organisation's image	5. Improve quality of service	6. Enhance organizational effectiveness	7. Potential for increasing customer knowledge/ market intelligence	8. Target new customer segments	9. Diversify and differentiate products	10. Personalise products and add value at all stages	11. Profit rationale: increase revenues/ market share	12. Achieve cost- competitive advantage by creating value for money	13. Create competitive environment	14. Outperform competition in the long run	15. Reinvent new and innovative business practices	16. Develop partnerships and explore ICT corporations	17. Provide the necessary ICT- infrastructure for the service	1. Cost constraints	2. Lack of content- rich information of destinations/ sites/ venues	3. Lack of content- rich information of accessibility	4. Restricted legal status for generating profit	5. Lack of strong image for providing reliable information on accessible tourism	6. Lack of direct contact with customer	7. Lack of booking facilities	8. Low market penetration	9. Absence of strong advertising and promotion strategies

### **7.3 Current Service Providers for the Disabled Market**

In recent years accessible tourism has shown promising sign of expansion. Tour operators have started to appreciate the potential of a market that has traditionally been poorly served.

Disability experts, especially in Europe, are joining forces through trans-national associations to exchange information, set up databanks, launch joint marketing campaigns and lobby for better services. At the same time, specialised European travel agents and non-profit organisations have been cooperating by pooling what they have learned about the availability of special facilities in various countries.

Therefore, it is considered crucial to map the current provision of accessible tourism according to level of specialisation in serving the disability market.

In Table 26 and 27, tourism players are classified by sector, into seven clusters: tourism intermediaries, content providers, attractions, restaurants & catering facilities, accommodation, destination management organisations (DMOs) and other public sector bodies. Then, they are divided into three categories, namely 'Mainstream', 'Mixed' and 'Specialised'. The categorisation was based on the information provision on accessibility. As 'Mainstream', are considered mainstream companies that do not provide any kind of information related to accessibility. The companies that have as their main focus to serve the bulk of the customer base, but provide some information on accessible tourism are described as 'Mixed'. Finally, the purpose-built organisations aiming to serve the disabled niche market are characterised as 'Specialised'.

The content analysis of those providers demonstrates that people with severe disabilities are best served by the specialised players in the marketplace. These players not only have appropriate facilities but they also have adequately trained staff for serving this market.

The mixed group has sufficient information to enable disabled travellers to decide the suitability of the facility. In most cases there is sufficient understanding of disability needs and efforts are made to address the requirements of this market.

Finally most of the mainstream providers have limited facilities for the disabled market and are marginally capable of serving this market. Hence, the classification of the tourism supply into three categories allows the identification of appropriate strategies to get suitable content from those providers and also to engage them with the OSSATE deployment.



**Table 23: Analysis of stakeholders according to accessibility information provision (selected examples) (part 1)**

	<b>Mainstream (purely Mainstream Companies)</b>	<b>Mixed (Mainstream but with sufficient provision for the disabled market)</b>	<b>Specialised (Disability Specific)</b>
<b>Tourism Intermediaries (TAs &amp; TOs)</b>	<a href="http://www.firstchoice.co.uk">www.firstchoice.co.uk</a> <a href="http://www.thomson.co.uk">www.thomson.co.uk</a> <a href="http://www.mytravel.com">www.mytravel.com</a> <a href="http://www.goingplaces.co.uk">www.goingplaces.co.uk</a> <a href="http://www.travelcare.co.uk">www.travelcare.co.uk</a> <a href="http://www.thomascook.com">www.thomascook.com</a> <a href="http://www.tui.com">www.tui.com</a> <a href="http://www.kuoni.com">www.kuoni.com</a> <a href="http://www.lastminute.com">www.lastminute.com</a> <a href="http://www.opodo.com">www.opodo.com</a> <a href="http://www.ebookers.com">www.ebookers.com</a> <a href="http://www.travelocity.com">www.travelocity.com</a> <a href="http://www.expedia.com">www.expedia.com</a> <a href="http://www.priceline.com">www.priceline.com</a> <a href="http://www.hrs.com">www.hrs.com</a>	<a href="http://www.activehotels.com">www.activehotels.com</a> <a href="http://www.waingunga.com">www.waingunga.com</a> <a href="http://www.nattura.com">www.nattura.com</a> <a href="http://www.buceoadaptado.com">www.buceoadaptado.com</a> <a href="http://www.deporteydesafio.com">www.deporteydesafio.com</a>	<a href="http://www.phicia.com/icare">www.phicia.com/icare</a> <a href="http://www.rollontravel.com">www.rollontravel.com</a> <a href="http://www.valinet.org">www.valinet.org</a> <a href="http://www.adistours.com">www.adistours.com</a> <a href="http://www.rbtravel.es">www.rbtravel.es</a> <a href="http://www.zafirotours.es">www.zafirotours.es</a> <a href="http://www.alpe.com">www.alpe.com</a> <a href="http://www.handiadventures.com">www.handiadventures.com</a> <a href="http://www.roth-travel.ch">www.roth-travel.ch</a> <a href="http://www.cato-reisen.ch">www.cato-reisen.ch</a> <a href="http://www.canbedone.co.uk">www.canbedone.co.uk</a> <a href="http://www.accessibletravel.co.uk">http://www.accessibletravel.co.uk</a> <a href="http://www.behindertenreisen.at">www.behindertenreisen.at</a>
<b>Content Providers</b>	<a href="http://www.lonelyplanet.com">www.lonelyplanet.com</a>	<a href="http://www.tiscover.com">www.tiscover.com</a>	<a href="http://wien.arbeiterkammer.at">wien.arbeiterkammer.at</a> <a href="http://www.bmaa.gv.at">www.bmaa.gv.at</a> <a href="http://www.viennaairport.com">www.viennaairport.com</a> <a href="http://www.oeamtc.at">www.oeamtc.at</a> <a href="http://www.info.wien.at/wtv">www.info.wien.at/wtv</a> <a href="http://www.urlaubsvolltreffer.com">www.urlaubsvolltreffer.com</a>
<b>Providers of tourist attractions (museums, theme parks, cultural heritage, etc.)</b>	<a href="http://www.tivoligardens.com">www.tivoligardens.com</a> <a href="http://www.portaventura.es">www.portaventura.es</a> <a href="http://www.warnerbrospark.com">www.warnerbrospark.com</a> <a href="http://www.gardaland.it">www.gardaland.it</a> <a href="http://www.alton-towers.co.uk">www.alton-towers.co.uk</a> <a href="http://www.casinomontecarlo.com">www.casinomontecarlo.com</a>	<a href="http://www.disneylandparis.com">www.disneylandparis.com</a> <a href="http://www.bpbltd.com">www.bpbltd.com</a> <a href="http://www.europa-park.de">www.europa-park.de</a> <a href="http://www.liseberg.com">www.liseberg.com</a> <a href="http://www.efteeling.nl/">www.efteeling.nl/</a> <a href="http://www.bakken.dk">www.bakken.dk</a> <a href="http://www.louvre.fr">www.louvre.fr</a> <a href="http://http://museoprado.mcu.es/home">http://museoprado.mcu.es/home</a> <a href="http://www.thebritishmuseum.ac.uk">www.thebritishmuseum.ac.uk</a> <a href="http://www.vatican.va">www.vatican.va</a>	<a href="http://www.pear.or.at">www.pear.or.at</a> <a href="http://www.octopus.or.at">www.octopus.or.at</a>
<b>Restaurants &amp; Catering Facilities</b>	Schweigers Bierbeisl Restorante Pizzeria da Panini Bieronymus Heidenreichstein Zur Wacht Der Talwirt Hausmusikhof - Alois Unger Alt Sievering Ing. Karl Welsler Karl Fuchs	<a href="http://www.gastroweb.at">www.gastroweb.at</a> <a href="http://www.lokalfuerer.at">www.lokalfuerer.at</a>	Inigo Pierrot Gulaschmuseum Jägerstüberl Bieramt Zur Gruabn Schnitzelwirt Max 's Beisl Ulitsch Konditorei "Zur Zimtschnecke"
<b>Accommodation</b>	<a href="http://www.bestwestern.com">www.bestwestern.com</a> <a href="http://www.clubmed.com">www.clubmed.com</a> <a href="http://www.choicehotels.com">www.choicehotels.com</a> <a href="http://www.summithotels.com">www.summithotels.com</a> <a href="http://www.medhotels.com">www.medhotels.com</a> <a href="http://www.marriott.com">www.marriott.com</a>	<a href="http://www.accor.com">www.accor.com</a> <a href="http://www.hilton.com">www.hilton.com</a> <a href="http://www.intercontinental.com">www.intercontinental.com</a> <a href="http://www.hayatt.com">www.hayatt.com</a> <a href="http://www.radisson.com">www.radisson.com</a> <a href="http://www.starwoodhotels.com">www.starwoodhotels.com</a>	<a href="http://www.feriekompagniet.dk">www.feriekompagniet.dk</a> <a href="http://www.hotelfjordgaarden.dk">www.hotelfjordgaarden.dk</a> <a href="http://www.propellen.dk">www.propellen.dk</a> <a href="http://www.skibelundkrat.dk">www.skibelundkrat.dk</a> <a href="http://www.hovborg-kro.dk">www.hovborg-kro.dk</a> <a href="http://www.labenbachhof.de">www.labenbachhof.de</a> <a href="http://www.mit-mensch.com/">www.mit-mensch.com/</a> <a href="http://www.eria-resort.gr">www.eria-resort.gr</a> <a href="http://www.disableds-resort.gr">www.disableds-resort.gr</a>
<b>DMOs</b>	<a href="http://www.travelpoland.com">http://www.travelpoland.com</a> <a href="http://www.tourism.lt/">http://www.tourism.lt/</a> <a href="http://www.visit-sweden.com">http://www.visit-sweden.com</a> <a href="http://www.tourismireland.com">http://www.tourismireland.com</a>	<a href="http://www.visitbritain.com">http://www.visitbritain.com</a> <a href="http://www.andalucia.com/home.htm">http://www.andalucia.com/home.htm</a> <a href="http://www.visitmalta.com">http://www.visitmalta.com</a> <a href="http://www.gotland.se">http://www.gotland.se</a> <a href="http://www.visitdevonandcornwall.com">www.visitdevonandcornwall.com</a> <a href="http://www.yorkshirevisitor.com">www.yorkshirevisitor.com</a>	<a href="http://www.accessiblebarcelona.com">www.accessiblebarcelona.com</a>

**Table 24: Analysis of stakeholders according to accessibility information provision (selected examples) (part 2)**

	<b>Mainstream (purely Mainstream Companies)</b>	<b>Mixed (Mainstream but with sufficient provision for the disabled market)</b>	<b>Specialised (Disability Specific)</b>
<b>Other public sector bodies</b>		<a href="http://www.oeeg.gr">www.oeeg.gr</a> <a href="http://www.ubytujsa.sk">www.ubytujsa.sk</a> <a href="http://www.theatre-access.co.uk">www.theatre-access.co.uk</a>	<a href="http://www.rollstuhl.at">www.rollstuhl.at</a> <a href="http://www.accesshandicapes.be">www.accesshandicapes.be</a> <a href="http://www.accesscity.be">www.accesscity.be</a> <a href="http://www.toegankelijkvlaanderen.be">www.toegankelijkvlaanderen.be</a> <a href="http://www.godadgang.dk">www.godadgang.dk</a> <a href="http://www.guide-accessible.com">www.guide-accessible.com</a> <a href="http://www.mev-courbevoie.org">www.mev-courbevoie.org</a> <a href="http://www.jaccede.com">www.jaccede.com</a> <a href="http://www.you-too.net">www.you-too.net</a> <a href="http://www.polibeaa.com/turismo">www.polibeaa.com/turismo</a> <a href="http://www.sociosanitarias.com">www.sociosanitarias.com</a> <a href="http://www.hapi.ch">www.hapi.ch</a> <a href="http://www.radarsearch.org">www.radarsearch.org</a> <a href="http://www.goodaccessguide.co.uk">www.goodaccessguide.co.uk</a> <a href="http://www.disabledgo.info">www.disabledgo.info</a> <a href="http://www.accessproject-phsp.org">www.accessproject-phsp.org</a> <a href="http://www.tourismforall.org.uk">www.tourismforall.org.uk</a>

## 7.4 Accessible Tourism Supply in Europe

In this section, an attempt is made to quantify accessible tourism supply. The aim is to compare at a pan-European level, the total tourism supply with the accessible tourism supply. For this purpose accessibility was regarded as wheelchair accessible. It was considered useful to elaborate on the three main sectors of the tourism industry that compose the most important elements of a destination, namely accommodation, attractions and restaurants & catering facilities. These are also the minimum facilities that disabled travellers will need to use.

Initially, NTOs were targeted for accessibility data acquisition due to the fact that they are the destination experts in their respective countries. However, in many cases they referred the researchers to disability organisations for such specific information or even to other content providers or tourism organisations. Therefore, it was essential to establish contacts with other sources of information as well. For each country a minimum of five sources were contacted. What was made clear from this process was that data regarding accessibility is either non-existent or hard to retrieve. For instance, some countries such as Poland, Slovenia or Estonia have absolutely no provision of such information. There are also significant differences in the structure and format when such data is available in different countries. Even in the same country, different sources provide different data in different formats.

One of the reasons data varies enormously and is scattered amongst dissimilar types of organisations, is that assessment and certification of the tourism supply is carried out by organisations of diverse backgrounds and employ different sets of criteria. Accessibility schemes if available, regardless if they are national, regional or local, do not always share information with the NTOs, so information on accessible tourism supply is not easy to retrieve even if it is existent.

Furthermore, the level of accessible tourism facilities per country is quite dissimilar. It is obvious that the distribution among the 25 EU countries is skewed due to several factors including social responsibility and awareness, legislation, level of demand and recency of

facilities construction. Hence, no model or pattern can evolve from countries that provide inclusive information (e.g. Czech Republic), that can be applied to the rest of the sample.

Table 28 illustrates the percentage of accessible tourism supply in contrast to total tourism supply per sector in the 25 EU countries according to current available information

**Table 25: Total and Accessible Tourism Supply**

	Accommodation (number of establishments)			Attractions			Restaurants & Catering Facilities		
	Total	Accessible	(%)	Total	Accessible	(%)	Total	Accessible	(%)
AUSTRIA	20609	295	1.4	-	-	-	-	-	-
BELGIUM	3558	175	4.9	1233	79	6.4	-	-	-
CYPRUS	961	39	4	-	-	-	-	-	-
CZECH REPUBLIC	3859	660	17.1	120	9	7.5	245	109	44.4
DENMARK	1097	130	11.8	-	-	-	1217	86	7.6
ESTONIA	854	-	-	422	-	-	100	-	-
FINLAND	1470	23	1.5	-	93	-	-	101	-
FRANCE	28649	368	1.2	-	196	-	-	100	-
GERMANY	55119	-	-	-	-	-	-	-	-
GREECE	8876	1094	12.3	-	-	-	-	120	-
HUNGARY	2741	330	12	-	-	-	-	-	-
IRELAND	8971	75	0.8	-	83	-	-	-	-
ITALY	31997	9248	28.9	-	-	-	-	-	-
LATVIA	326	-	-	-	-	-	-	-	-
LITHUANIA	1221	122	9.9	-	-	-	1254	103	8.2
LUXEMBOURG	560	42	7.5	-	-	-	257	0	-
MALTA	361	23	6.3	46	-	-	928	1	0.1
NETHERLANDS	7080	196	2.7	1425	427	29.9	110	36	32.7
POLAND	8376	-	-	-	-	-	-	-	-
PORTUGAL	2214	-	-	-	-	-	2115	-	-
SLOVAKIA	2084	235	11.2	-	-	-	275	64	23.2
SLOVENIA	981	-	-	-	-	-	793	-	-
SPAIN	22348	1525	6.8	-	-	-	41789	45	-
SWEDEN	2770	250	9	-	-	-	-	-	-
UK	62828	938	1.4	7806	-	-	-	-	-
<b>SUM</b>	<b>279910</b>	<b>15768</b>	<b>5.6</b>	<b>11052</b>	<b>1258</b>	<b>11.3</b>	<b>49083</b>	<b>765</b>	<b>1.5</b>

It is evident from this table that accessible tourism supply represents the 5.6% of the total known stock with regards to accommodation units, 11.3% with respect to tourism attractions and 1.5% of restaurants & catering facilities.

Though these figures cannot be accurate given the lack of data, they definitely indicate that only a small proportion of the current tourism supply is accessible and designed 'for all'. Therefore, OSSATE should provide and disseminate good practice in accessible design and modifications, in order to increase the supply and also to lobby for better information (OSSATE, 2006). Due to the focus of this project, the cases of Greece and the UK will be further elaborated.

## 7.5 The case study of Greece and England Examples

### 7.5.1 The Greece Example

Greece is one of the most popular tourist destinations worldwide. According to the Greek National Tourism Organisation, it welcomes more than 14 million tourists each year, a figure that places it in the 15th position on the World Tourism Organisation list of countries with inbound tourism. Over the past decades Greece has witnessed the development of modern and multiform large or small-scale tourist infrastructures catering to the demands and accommodation requirements of every visitor. Today Greece's accommodation potential numbers 670,000 beds, distributed over 352,000 rooms in approximately 8,900 hotel units. On most of the Greek islands and mainland Greece, visitors can also find accommodation in private houses (rooms to let) which are operating under the special seal of the Greek National Tourism Organisation. In fact, the SMEs count for 80% of the total tourism supply (Buhalis & Deimezi, 2003). Moreover, there are more than 340 campings all over the country, offering 30,000 camping spaces and 2,500 small houses. As far as attractions are concerned, there are over 70 museums in the capital city of Athens alone, and over 1500 historical monuments all over the country. The total numbers of attractions and restaurants & catering facilities are not available.

The numbers of the known accessible tourism provision on the other hand are very low. Still, in the past few years an attempt was made to improve the accessibility of many businesses in five major Greek cities, mainly due to the fact that they would host the Olympic and Paralympic Games in 2004. Then, a project called 'ERMIS' was launched that ended up in transforming over 1300 businesses into accessible places. Out of those, 1225 were related to the tourism industry. In particular, 1094 accessible accommodation units were recorded, as well as 120 restaurants & catering facilities (Table 29) and 11 entertainment venues. Most of those places are of mixed design and often have only temporary equipment (e.g. ramps) to serve disabled visitors as and when required.

**Table 26: Accessible Tourism Restaurants & Catering Facilities in Greece**

Restaurants & Catering F.	Cities					SUM
	ATHENS	THESSALONICA	VOLOS	CRETE	PATRA	
FAST FOOD	24	17	3	1	1	<b>46</b>
RESTAURANTS	31	1	2	1	1	<b>36</b>
CAFE	22	3			1	<b>26</b>
BAR	12					<b>12</b>
<b>SUM</b>	<b>89</b>	<b>21</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>120</b>

Although there might be numerous 'Mainstream' tourism enterprises, there only a few 'Specialised', purpose-built companies targeting solely the disabled market. These include 3 hotels (Eria, Sirenes and Tryptichon resort), one transport agency (Pancor), one company that provides sailing holidays (Charteryachtholidays), and one charity acting as a travel agency (Therapeuticholidays) that directs customers to a specially designed camp on the island of Crete.

### 7.5.2 *The England Example*

Tourism is one of the largest industries in the UK. According to VisitBritain, the UK National Tourism Board, tourism accounts for 3.4% of the UK economy and it was worth approximately £74.2 billion in 2003. The 24.7 million overseas visitors who came in 2003 spent £11.9 billion in the UK.

In 2003 the UK ranked sixth in the international tourism earnings league behind the USA, Spain, France, Italy and Germany. Expenditure in 2003 is estimated to be over £59 billion. This input to the UK economy derives from the big numbers of the existing tourism supply.

In particular, England's total accommodation stock currently numbers 62,828 establishments distributed amongst 34,798 serviced, 24,503 self-catering, 2,711 caravan & camping, 816 hostels and Campuses (Annex A). It is also claimed by VisitBritain that the figure of attractions spread throughout the country reaches the number of 7,806. However, there is no total number available regarding the restaurant & catering facilities.

The VisitBritain National Accessible Scheme (NAS) provides a set of Accessible Standards for accommodation establishments that are assessed and awarded a rating. It was developed following extensive review with accommodation providers, guests and many organisational bodies representing people with disabilities, together with other Tourism Boards. Standards cover three types of impairment: mobility, hearing and visual. There are four categories for mobility, and two each for visual and hearing impairment. However, at present it is only accommodation that is being assessed, no other element of the destination.

At present there are 435 accommodation establishments within VisitBritain's NAS (Annex A). There is no official number or percentage of accessible attractions or restaurants & catering facilities.

Since 1995 when the DDA legislation was introduced, it is expected that most facilities should have made reasonable adjustments to their premises and services to comply with the law. According to Couch, Forrester & McGaughey 2003, London's wider area can provide a significant number of accessible facilities and services. In particular, the accessible accommodation provision in that area numbers 88 accommodation units, whereas there are almost 60 Museums and over 300 attractions and entertainment venues. With regards to restaurants and catering facilities, the number of accessible venues is also above 300.

Additionally, [goodgallerieguide.com](http://goodgallerieguide.com) also provides a database that contains over 100 accessible galleries in the UK. Furthermore, there are also other disability related organisations that assist in the provision of information regarding accessibility, such as Tourism For All, Tripscope and Artsline that can be considered as good examples and initiatives. Still, there is no organised, structured and collective set of data that could be leveraged to national level.

## 7.6 Summary: Stakeholder Analysis

Chapter 7 gave an overview of key stakeholders involved in the provision of information on accessible products and services, a brief description of accessible tourism provision within the 25 European member states and a comparison between demand and supply. Further, case studies for the UK and Greece were provided.

- Different stakeholder groups share interest in the OSSATE e-service.
- Tourism providers can be classified as 'Mainstream', 'Mixed', and 'Specialised' according to the provision of accessible services.
- Information regarding accessibility is scattered amongst different players and it hard to retrieve.
- It is available in different formats according to type of organisation providing it.
- The accessible tourism supply is a small percentage of the total tourism supply.
- There are different levels of accessibility among the 25 EU countries, due to a number of reasons including public perceptions, demand and legislation.
- The Greece example demonstrates that there is some initiative towards accessibility driven mainly by revenue and not by legislation.
- The UK example illustrates that legislation fails to motivate the tourism industry in becoming accessible. Still, a number of private initiatives demonstrate that the demand for accessibility requires a specialised search as the bulk of the tourism supply is not designed for all.

## 8. Conclusion

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Changes in society have a strong impact on tourism, as tourism is an integral part of our society. It is important for the tourism industry to assess these changes at an early stage in order to determine the subsequent trends and necessities in demand.

Given the current demand and supply situation, reflecting a high demand for accessibility by more than 130 million European citizens having the economic resources to travel, and a general poor provision of accessible facilities, the response from OSSATE to the tourism industry can be summarised as follows.

By providing an e-service for accessible tourism products and facilities, OSSATE is expected to open up tourism in the EU to a wide sector of potential tourists, focusing mainly, but not exclusively, on the market segments that have been identified in section 6.4.1. The aim is to provide accessibility services for all types of access requirements. Based on this aim, OSSATE needs a network of companies that know the details of access locally and who can work with their counterparts in Europe to provide a seamless, accessible travel experience.

An important value requirement for this network is the provision of information that is trusted, wide-ranging for addressing an inclusive audience and that gives important references and comparisons to explain different schemes across Europe. Focusing on the stakeholders within that network, value added services can be provided by incorporating a wide range of suppliers. Distribution of the OSSATE service should include specialised agencies, disability organisations and charities together with mainstream channels such as Destination Management Organisations, e-Mediaries and DMS providers. All distributors need to have well-defined responsibilities for approaching the market.

This will have benefits for the competitiveness of tourism actors and will enable the tourism industry to improve its quality of service provision, by matching supply with the expectations of the customers requiring accessibility. The establishment of OSSATE as an accessible tourism information service in Europe will help all tourism actors that use or participate in this service to expand their market reach, differentiate their product and achieve operational benefits.

Hence, it is of great importance to raise awareness of accessibility market needs, and of the economic benefits of offering an appropriate response. A major challenge is that tourism activity begins with the decision to travel and ends with the return home, generating a huge chain of products and services that involves transport, amenities such as hotel services and gastronomy, attractions, activities and ancillary services as represented in the framework of the tourism system in Figure 2. Not only should all those facilities and the links between them be accessible, but also sufficient information should be accessible on the internet, using accessible methods of information provision. The information should then lead to bookings and travel arrangements in a convenient manner.

Furthermore, OSSATE is established with the objective of sharing knowledge, concerns, and information regarding best practice across the European member states. OSSATE aims to monitor the evolution of the accessible tourism information service, identifying the social and economic impact that it generates and enhancing the collaboration of various actors.

The success of OSSATE will therefore largely depend on a well-formulated and sustainable business model, embracing an extensive network of stakeholders and addressing all value requirements outlined earlier. When successful, the quality of OSSATE will represent a benefit for society at large. The coordination of stakeholders and the development of networking should turn the phrase "Tourism for All" into reality.



## 9. References

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- American Foundation for the Blind (2005) **Key Definitions of Statistical Terms**. Viewed on 15<sup>th</sup> of June 2005. <http://www.afb.org/section.asp?SectionID=15&DocumentID=1280>
- Aitchison, C. (2003) From Leisure and Disability to Disability Leisure: Developing Data, Definitions and Discourses. **Disability and Society**, Vol. 18 (7), pp. 955-969
- Bloch, D. (2000) **OECD Tables and Figures on Ageing**. Viewed on 6<sup>th</sup> of May 2005. <http://www.oecd.org/dataoecd/27/44/2345400.pdf>
- BMWA – Federal Ministry of Economic and Labour (2003) **Ökonomische Impulse eines barrierefreien Tourismus für alle - Kurzfassung der Studie**. Münster, Berlin
- BMWA – Federal Ministry of Economic and Labour (2004) **Economic Impulses of Accessible Tourism for All**. Report, Berlin, Bundesministerium für Wirtschaft und Arbeit
- Brown, F. (1991) Tourism for all. **Tourism Management**, Vol. 12 (3), pp. 258-260
- Buhalis, D. (2000) Marketing the Competitive Destination of the Future. **Tourism Management**, Vol. 21 (1), pp. 97-116
- Buhalis, D. (2003) **eTourism: Information technology for Strategic Tourism Management**, Harlow, Prentice Hall
- Buhalis, D. & Deimezi R. (2004) eTourism developments in Greece, **International Journal of Tourism and Hospitality Research**, Vol. 5 (2), pp.103-130.
- Burnett, J.J. & Bender Baker, H. (2001) Assessing the Travel-Related Behaviours of the Mobility-Disabled Consumer. **Journal of Tavel Research**, Vol. 40 (1), pp. 4-11
- Cavinato, J.L. & Cuckovich, M.L. (1992) Transportation and Tourism for the Disabled: An Assessment. **Transportation Journal**. Vol. 31 (3), pp. 46-53
- Cloerkes, G. (2001) **Soziologie der Behinderten. Eine Einführung**. Heidelberg, Universitätsverlag Winter
- Cordis (1995) **Cost 322: Low Floor Busses**. Final report. Viewed on 18<sup>th</sup> of May 2005. <http://www.cordis.lu/cost-transport/src/cost-322.htm>
- Couch, G., Forrester, W. & McGaughey, D. (2003) **Access in London**, Bloomsberry Plc, 4<sup>th</sup> edition, London
- Darcy, S. (1998a) **Anxiety to Access: Tourism Patterns and Experiences of New South Wales People with a physical Disability**. Sydney, NSW: Tourism New South Wales

- Darcy, S. (1998b) **People with a Disability and Tourism Bibliography**. Online Bibliography No. 7. Viewed on 28<sup>th</sup> of May 2005. [http://www.business.uts.edu.au/1st/downloads/07\\_Disability\\_Tourism.pdf](http://www.business.uts.edu.au/1st/downloads/07_Disability_Tourism.pdf)
- Darcy, S. & Dauwalla, P.S. (1999) The Trouble with Travel: People with Disabilities and Tourism. **Social Alternatives**, Vol. 18 (1), pp. 41-46
- Darcy, S. & Harris, R. (2002) Inclusive and accessible special events planning: An Australian perspective. **Event Management**, Vol. 8 (1), pp. 3-47
- Declercq, K. (2004) **Het Reisgedrag van Personen met een motorische Handicap in Vlaanderen**. Thesis. Vrije Universiteit Brussel
- DEO (Department of Education, Massachusetts) (2005) **Disability Definitions and Related Links**. Viewed on 30<sup>th</sup> of May 2005. <http://www.doe.mass.edu/sped/definitions.html>
- Disability Rights Commission (2004) **Making rights a reality**. Disability Rights Commission, Disability Briefing, December 2004. Viewed on 18<sup>th</sup> of April 2005. [http://www.drc-gb.org/publicationsandreports/briefing\\_html.asp](http://www.drc-gb.org/publicationsandreports/briefing_html.asp)
- Disability Rights Commission (2005) **About your Rights**. Viewed on 01<sup>st</sup> of July 2005. <http://www.drc-gb.org/knowyourrights/aboutyourrights.asp>
- Disability Rights Task Force (1999) **From Exclusion to Inclusion: Final Report of the Disability Rights Task Force**. Viewed on 25<sup>th</sup> of May 2005. [http://www.disability.gov.uk/drtf/full\\_report/#ad\\_6](http://www.disability.gov.uk/drtf/full_report/#ad_6)
- Eills, C. (2001) Lessons about Autonomy from the Experience of Disability. **Social Theory and Practice**, Vol. 27 (4), pp. 599-615
- Epstein, R. (1998) Trouble-free Vacations. **Exceptional Parent**, Vol. 28 (3), p. 61
- ETC (European Travel Commission) (2004) **Tourism Trends for Europe**. Viewed on 18<sup>th</sup> of April 2005. <http://www.etc-corporate.org/modules.php?name=Content&pa=showpage&pid=100&ac=5>
- Eurobarometer (2001) **Attitudes of Europeans to Disability**. European Commission. Viewed on 6<sup>th</sup> of April 2005. [http://europa.eu.int/comm/public\\_opinion/archives/eb/ebs\\_149\\_en.pdf](http://europa.eu.int/comm/public_opinion/archives/eb/ebs_149_en.pdf)
- European Disability Forum (2001) **EDF Position Paper on Tourism: Framing the Future of European Tourism**, Doc. EDF 01/13 EN, Brussels, Belgium
- European Disability Forum (2005) **People with Disabilities in the European Union: Some facts and figures**. Viewed on 18<sup>th</sup> of April 2005. <http://www.edf-feph.org/Papers/StructuralFunds/HearingMarch2005/General%20facts%20and%20figures%20on%20disability.doc>
- Eurostat (2001) **Disability and Social Participation in Europe**. European Communities, Luxembourg. Viewed on 25<sup>th</sup> of May 2005. [http://www.eds-destatis.de/downloads/publ/en3\\_disability.pdf](http://www.eds-destatis.de/downloads/publ/en3_disability.pdf)

- Eurostat (2002) **Health Statistics: Key Data on Health 2002**. ISBN 92-894-3730-8, European Communities, Luxembourg
- Eurostat (2003) **Employment of Disabled People in Europe in 2002**. ISBN 1024-4352, catalogue number: KS-NK-03-026-EN-N, European Communities 2003, viewed on 06<sup>th</sup> of April 2005. [http://epp.eurostat.cec.eu.int/cache/ITY\\_OFFPUB/KS-NK-03-026/EN/KS-NK-03-026-EN.PDF](http://epp.eurostat.cec.eu.int/cache/ITY_OFFPUB/KS-NK-03-026/EN/KS-NK-03-026-EN.PDF)
- Eurostat (2005a) **Tourism in the Enlarged European Union**. ISSN 1561-4840, catalogue number: KS-NP-05-013-EN-N, European Communities 2005, viewed on 06<sup>th</sup> of April 2005. [http://epp.eurostat.cec.eu.int/cache/ITY\\_OFFPUB/KS-NP-05-013/EN/KS-NP-05-013-EN.PDF](http://epp.eurostat.cec.eu.int/cache/ITY_OFFPUB/KS-NP-05-013/EN/KS-NP-05-013-EN.PDF)
- Eurostat (2005b) **Population and Social Conditions: Percentual Distribution of Types of Disability by Sex and Age Group**. All accessed on 13<sup>th</sup> of June 2005. <http://epp.eurostat.cec.eu.int>
- Gerlin, A. (2005) Access Denied. **Time Europe**, Vol. 165 (15). Viewed on 18<sup>th</sup> of April 2005. [http://www.time.com/time/europe/magazine/article/0,13005,901050411-1044655,00.html?promoid=rss\\_world](http://www.time.com/time/europe/magazine/article/0,13005,901050411-1044655,00.html?promoid=rss_world)
- Gilson, S.F. & Depoy, E. (2000) Multiculturalism and Disability: A Critical Perspective. **Disability and Society**, Vol. 15 (2), pp. 207-218
- Hompel, B. (2003) Barrierefrei Wohnen - Nicht nur eine Frage des Komforts. Betrachtungen aus der Praxis, in Neumann, P., **Barrierefreie Städte und Regionen**. Arbeitsberichte der Arbeitsgemeinschaft Angewandte Geographie Münster Bd. 33, Münster
- Horgan-Jones, M. & Ringaert, L. (2004) **Accessible Tourism in Manitoba**. Viewed on 30<sup>th</sup> of May 2005. <http://www.ttra.com/pub/uploads/AccessibleTourismInManitoba.htm>
- Householder, J. (2001) **Mobility Impairment**. Viewed on 17<sup>th</sup> of May 2005. <http://atoz.iqhealth.com/HealthAnswers/encyclopedia/HTMLfiles/3246.html>
- ICF (International Classification of Functioning, Disability and Health) (2001) **The International Statistical Classification of Diseases and Related Health Problems**. Viewed on 27<sup>th</sup> of September 2005. <http://www3.who.int/icf/>
- Internet World Stats (2005) **Internet Usage in the European Union**. Viewed on 7<sup>th</sup> of April 2005. <http://www.internetworldstats.com/stats4.htm>
- Kwai-sang Yau, M., McKercher, B. & Packer, T.L. (2004) Travelling with a Disability – More than an Access Issue. **Annals of Tourism Research**, Vol. 31 (4), pp. 946-960
- Larkin, V.M., Alston, R.J., Middleton, R.A. & Wilson, K.B. (2001) Underrepresented Ethnically and Radically Diverse Ageing Populations with Disabilities: Trends and Recommendations, **Journal of Rehabilitation**, Vol. 69 (2), pp. 26-31
- Leiper, N. (1995) **Tourism Management**, RMIT Press, Melbourne

- Los Angeles Times (1998) **Help the Disabled Work**. Lead Editorial, Sunday, 13<sup>th</sup> of December 1998, p.4
- McKercher, B., Packer, T., Yau, M.K. & Lam, P. (2003) Travel Agents as Facilitators or Inhibitors of Travel: Perceptions of People with Disabilities. **Tourism Management**, Vol. 24 (4), pp. 465-474
- Miller, G. & Kirk, E. (2002) The Disability Discrimination Act: Time for a stick? **Journal of Sustainable Tourism**, Vol. 10 (1), pp. 82-88
- National Disability Authority (2003) **Accessibility and Tourism**. Tourism Policy Review Group. Viewed on 19<sup>th</sup> of April 2005. <http://www.nda.ie/>
- National Institute on Disability and Rehabilitation Research (2000) **NIDRR Long-Range Plan: 1999-2003**. Office of Special Education and Rehabilitative Services, National Institute on Disability and Rehabilitation Research, US Department of Education
- Neumann, P. (2002) **Barrierefreier Tourismus – Vom Tourismus für Menschen mit Behinderung zum Tourismus für Alle**, Universität Paderborn, Germany
- New Media Review (2005) **World & Regional Overview: Online Travel Market**. Viewed on 06<sup>th</sup> of April 2005. <http://www.etcnewmedia.com/review/default.asp?SectionID=10&CountryID=50>
- NOP Consumer (2003) **Holiday-Taking and Planning Amongst People with a Disability**, Ref. 434906, NOP Consumer, London
- Odette, F., Yoshida, K.K., Israel, P., Li, A., Ullman, D., Colantonio, A., Maclean, H. & Locker, D. (2003) Barriers to Wellness Activities for Canadian Women with Disabilities. **Health Care for Women International**, Vol. 24, pp. 125-134
- ODO (Open Doors Organization) (2002) **Travelers with Disabilities**. ODO/ Harris Survey. Viewed on 15<sup>th</sup> of September. <http://opendoorsnfp.org>
- ODO (Open Doors Organization) (2005) **Travelers with Disabilities**. ODO/ Harris Survey. Viewed on 15<sup>th</sup> of September. <http://opendoorsnfp.org>
- OECD – Organisation for Economic Cooperation and Development (2005) **Impact of Population Ageing on Health and Long-Term Care Expenditure: Assessing the Effect of Morbidity, Disability and other Cost Drivers**. Health Division, OECD, Workshop organised by the European Commission (Working Group on Ageing) 21 – 22 February, Brussels
- Opportunity Age Consultation (March 2005) **Opportunity Age: Meeting the Challenges of Ageing in the 21<sup>st</sup> Century**. Viewed on 19<sup>th</sup> of April 2005. [http://www.dwp.gov.uk/opportunity\\_age/index.asp](http://www.dwp.gov.uk/opportunity_age/index.asp)
- OSSATE (2005) **Contract no. EDC-11278 OSSATE**, Greece, EWORX

- OSSATE (2006) **One-Stop-Shop for Accessible Tourism Annual Report, 2005**. Viewed on 12 May 2006. [http://www.ossate.org/docs/OSSATE\\_D1.3\\_Annual\\_Public\\_Report\\_2005\\_public.pdf](http://www.ossate.org/docs/OSSATE_D1.3_Annual_Public_Report_2005_public.pdf)
- Phillips, D. (2002) **The Disability Act Revisited – The Implications of 2004 for Tourism and Hospitality**. Tourism Intelligence Papers, A-45, English Tourism Council
- Pomona (2004) **Health Indicators for People with Intellectual Disability in the Member States**. Interim Report November 2002 – January 2004. 2002/203496 – 00. Viewed on 18th of April 2005. [http://europa.eu.int/comm/health/ph\\_projects/2002/monitoring/fp\\_monitoring\\_2002\\_inter\\_05\\_en.pdf](http://europa.eu.int/comm/health/ph_projects/2002/monitoring/fp_monitoring_2002_inter_05_en.pdf)
- Preston, K. (2001) **Hearing Impairment**. Viewed on 29<sup>th</sup> of May 2005. <http://atoz.iqhealth.com/HealthAnswers/encyclopedia/HTMLfiles/3022.html>
- Putnam, M., Geenen, S., Powers, L., Saxton, M., Finney, S. & Dautel, P. (2003) Health and Wellness: People with Disabilities Discuss Barriers and Facilitators to Well-Being. **Journal of Rehabilitation**, Vol. 69 (1), pp. 37-45
- Pühretmair, F. (2004) It's time to make eTourism accessible. In Miesenberger, K., Klaus, J., Zagler, W. & Burger, D. (Eds.) **Computers helping people with special needs**. 9<sup>th</sup> International Conference, ICCHP 2004, Paris, France, July 2004, Proceedings, Berlin, Springer Verlag
- Qualitas (2004) **Conclusions of the 1<sup>st</sup> International Congress on "Tourism for all"**. Viewed on 6<sup>th</sup> of May 2005. <http://www.world-tourism.org/quality/E/standards2.htm>
- Ray, N.M. & Ryder, M.E. (2003) "Eibilities" Tourism: An Exploratory Discussion of the Travel Needs and Motivations of the Mobility Disabled. **Tourism Management**, Vol. 24 (1), pp. 57-72
- Rayport, J.F. & Sviokla, J.J. (1995) Exploiting the Virtual Value Chain. **Harvard Business Review**. November - December
- Reitsma, R. (2004) **The Rise and Rise of European Seniors Online**. Forrester Research. Viewed on 13<sup>th</sup> of June 2005. <http://www.forrester.com/Research/Document/Excerpt/0,7211,36135,00.html>
- Sautter, E. T. & Leisen, B. (1999) Managing Stakeholders: A Tourism Planning Model. **Annals of Tourism Research**, Vol. 26 (2), pp. 312-328
- Schmidt, U. (2004) **Die Politik der Bundesregierung für behinderte Menschen ist eine Erfolgsstory**. Press release of the Ministry for Health and Social Security, 15<sup>th</sup> of December 2004, Berlin
- Shaw, G. & Coles, T. (2004) Disability, Holiday Making and the Tourism Industry in the UK: a preliminary survey. **Tourism Management**, Vol. 25 (3), pp. 397-404

- Shaw, G. Veitch, C. & Coles, T. (2005) Access, Disability and Tourism: Changing Responses in the United Kingdom. **Tourism Review International**, Vol. 8 (3), pp. 167-176
- Shelton, E.J. & Tucker, H. (2005) Tourism and Disability: Issues Beyond Access. **Tourism Review International**, Vol. 8 (3), pp. 211-219
- Stamboulis, Y. & Skayannis, P (2003) Innovation Strategies and Technology for Experience-based Tourism, **Tourism Management**, Vol. 24 (1), pp. 35-43
- Statistics New Zealand (1997) **1996 Household Disability Survey**. Wellington. Author
- Statistisches Bundesamt (2003a) **Statistik der Schwerbehinderten Menschen**. Viewed on 6<sup>th</sup> of May 2005. [http://www.destatis.de/download/d/solei/solei\\_2001.xls](http://www.destatis.de/download/d/solei/solei_2001.xls)
- Statistisches Bundesamt (2003b) **Bevölkerung Deutschlands bis 2050. 10 koordinierte Bevölkerungsvorausberechnung**. Viewed on 6<sup>th</sup> of May 2005. [http://www.destatis.de/presse/deutsch/pk/2003/Bevoelkerung\\_2050.pdf](http://www.destatis.de/presse/deutsch/pk/2003/Bevoelkerung_2050.pdf)
- Statistisches Bundesamt (2005) **Auszug aus Wirtschaft und Statistik**. Wiesbaden. SFG Servicecenter Fachverlage
- Stokols, D. (2000) Creating Health-Promotive Environments: Implications for Theory and Research. In M.S. Jammer & D. Stokols (Eds.), **Promoting Human Wellness: News frontiers for Research, Practice and Policy**. Berkeley, CA, University of California Press
- Stumbo, N.J. & Pegg, S. (2005) Travellers and Tourists with Disabilities: A Matter of Piorities and Loyalties. **Tourism Review International**, Vol. 8 (3), pp. 195-209
- Thimm, W. (1994) **Leben in Nachbarschaften. Hilfen für Menschen mit Behinderungen**. Freiburg, Herder Spektrum
- Toerisme Vlaanderen (2001) **Tourism for all in the European Union**. Status Report on Tourist Accommodation Schemes in Europe. Meeting of EU Ministers of Tourism, "Tourism for all", Brugge 1<sup>st</sup> - 2<sup>nd</sup> of July 2001. Viewed on 13 May 2006. <http://www.toegankelijkheidsbureau.be/docs/Tourism%20for%20All%20Report%20Final%20SEP2001b.pdf>
- Turco, D.M., Stumbo, N.J. & Garncarz, J. (1998) Tourism Constraints for People with Disabilities. **Parks & Recreation**, Vol. 33 (9), pp. 78-84
- Union of the Physically Impaired Against Segregation (1975) **Fundamental Principles of Disability**. Summary of the discussion held on 22<sup>nd</sup> of November, 1975, London. Viewed on 22<sup>nd</sup> of June 2005. <http://www.gmcdp.com/accessible/fundamental.doc>
- United Nations (1983) **Decade of Disabled Persons 1983-1992. World Programme of Action Concerning Disabled Persons**. New York, United Nations

- United Nations (1990) **Disability Statistics Compendium**. Statistics on Special Population Groups, Series Y, No. 4, New York, United Nations
- United Nations (1993) **Special Issue: Population Ageing and the Situation of Elderly Persons**. Viewed on 4<sup>th</sup> of May 2005. <http://unstats.un.org/unsd/demographic/sconcerns/disability/disab2.asp>
- Upchurch, R.S. & Seo, J.W. (1996) Civic Responsibility and Market Positioning: Complying with the Americans with Disabilities Act. **Facilities**, Vol. 14 (5/6), pp. 48-53
- U.S. Census Bureau (2005) **IDB Summary Demographic Data**. International Database. Viewed on 01<sup>st</sup> of July 2005. <http://www.census.gov/>
- U.S. Department of Commerce (1997) **Current Population Report: Americans with Disabilities: 1994-95**. Viewed on 25<sup>th</sup> of May 2005. <http://census.gov/hhes/www/disable/sipp/disable9495>.
- Van Horn, L. (2002) **Travellers with Disabilities: Market Size and Trends**. Viewed on 30<sup>th</sup> of May 2005. <http://ncpedp.org/access/isu-travel.htm>
- Vash, C. L. (2003) Disability Attitudes for all Latitudes. **Journal of Rehabilitation**, Vol. 67 (1), pp. 38-42
- Veitch, C. & Shaw, G. (2004a) **Access and Tourism: A Widening Agenda**. Tourism Intelligence Papers, A – 121, British Tourist Authority
- Veitch, C. & Shaw, G. (2004b) **Understanding Barriers to Tourism in the UK**. Tourism Intelligence Papers, A – 185, British Tourist Authority
- W3C (World Wide Web Consortium) (1999) **Web Content Accessibility Guidelines 1.0**. Viewed on 6<sup>th</sup> of July 2005. <http://www.w3.org/>
- Wang, Y., Norman, W.C. & McGuire, F.A. (2005) A Comparative Study of Leisure Constraints Perceived by Mature and Young Travellers. **Tourism Review International**, Vol. 8 (3), pp. 263-279
- Waschke, S. (2004) **Labeling im Barrierefreien Tourismus in Deutschland – Vergleichende Analyse auf Basis Europäischer Beispiele**. Thesis. Universität Lüneburg
- Wendell, S. (1996) **The Rejected Body: Feminist Philosophical Reflections on Disability**. New York. Routledge
- Werthner, H. & Klein, S. (1999) **Information Technology and Tourism – A Challenging Relationship**. Wien, Springer Verlag
- WHO (World Health Organisation) (1992) **The International Classification of Diseases, 10<sup>th</sup> Revision**. Geneva, World Health Organisation



UNIS	REF: OSSATE_D6.1
One Stop Shop for Accessible Tourism in Europe - OSSATE	VERSION: 010
DELIVERABLE 6.1: MARKET, STAKEHOLDER AND VALUE CHAIN ANALYSIS	PRIORITY STATUS: HIGH

## **10. Annex A: Total and Accessible Accommodation Supply in England**

	Serviced			Self-Catering estabs.			Caravan & Camping			Hostels & Campus			Total for all accom types		
	Known stock	In National Quality Assurance Scheme	In National Accessible Scheme	Known stock	In National Quality Assurance Scheme	In National Accessible Scheme	Known stock	In National Quality Assurance Scheme	In National Accessible Scheme	Known stock	In National Quality Assurance Scheme	In National Accessible Scheme	Known stock	In National Quality Assurance Scheme	In National Accessible Scheme
All England total	34,798	10,761	165	24,503	10,857	230	2,711	1,052	26	816	291	14	<b>62,828</b>	<b>22,961</b>	<b>435</b>

Source: VisitBritain 31 March 2005