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Disability is a global issue and aging people form a large part of it, with the development of human rights and anti-discrimination, attention is paid on accessibility and universal design for disabled people. As a growing niche market, accessible tourism brings more and more demands to tourism industry, whereas suppliers in tourism industry are lacking adequate facilities and services are a big challenge. As estimated that 130 million disabled tourists visit Europe with approximate 68 billion Euros every year and the number will be doubled in the following 20 years (UNESCO). Knowing the relationship between aging and disability, individuals' special requirements would provide qualified tourism products and services for disabled tourists. Norway is one of the foremost countries in the world which provides a barrier free environment for disabled visitors with enhanced anti-discrimination laws and considered action plan.

The purpose of this thesis is to introduce successful factors of accessible tourism in Oslo and to give recommendations for current and future development through data collection, legislation reviewing, analysing and case studying. Case studies of barrier-free Oslo are presented, from gateways to main attractions, to cover a large range of places. Additionally, success factors and challenges are found and summarized by observation and analyses. Disabled tourists have more chances and a better way to go for travel with promoted and adapted facilities and services.

Even though there are many inevitable challenges and difficulties, a new level of accessibility will be achieved by government's action plan which is called "Norway universally designed by 2025". Cooperation between different ministries and local governments is also important when implementing the action plan. Additionally, International cooperation plays a vital role for learning experiences and getting creative ideas.

Key words: Disability definition, Aging population, Universal design, Accessible tourism, Customer segments

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1 Introduction

There is an undoubted fact that tourism is one of the world's largest industries and a key driver of socio-economic progress. It helps through the creation of jobs and enterprises, infrastructure development and export revenues earned nowadays. As estimated by UNWTO (United Nations World Tourism Organization) the revenues that come from international tourism has reached US\$ 919 billion worldwide (693 billion Euros) in 2012. The growing importance of tourism is a worldwide trend no matter how developed or developed country is. (UNWTO,2012)

The varieties of needs required from tourists and benefits gained from tourism industry lead to fierce competition nowadays. Several phrases such as "visitor friendly tourism" and "barrier free tourism" were introduced with declaration of the disability rights and independent living movement. Those changes accelerate the birth of a niche market-accessible tourism. "Accessible tourism is a process of enabling people with disabilities and seniors to function independently and with equity and dignity through the delivery of universal tourism products, services and environments." (Darcy 2006,6). Accessible tourism as a niche market was not seen important in the past, with the development of new technologies and the demands from different kinds of tourists, especially the disabled and senior travellers, accessibility is seen important nowadays not only for humanitarian reasons but also for the competition of suppliers of tourism industry. Efforts put on accessible tourism bring convenience and increased living standard for both tourists and locals in most countries. However, there are still lots of aspects that have been neglected of which if properly looked into would give accessible tourism a considerable boost and consequently impact on national and global economy. (Darcy 2006,6)

Within an environment the movement for barrier-free travel is now underway to some degree in most countries, Norway is not an exception. Choosing Oslo as the research target was inspired by a previous study "Accessible tourism in Arabianranta". The author got the basic knowledge about accessible tourism and research methods by observation and evaluation of the facilities and services in Arabianranta where the headstream of Helsinki is. Besides, the author got a chance to explore Oslo deeply when being on an exchange programme to Norway for half a year. As two main Nordic capitals and urban tourism destinations, Helsinki and Oslo have many similarities in offering facilities and services for barrier-free tourism. On the other hand, Oslo is unique from some aspects, for instance, the accessible facilities and services are broadly utilised in Oslo where the biggest city and tourists destination in Norway is. Norwegian design is also different from Finnish design. Hence, this thesis concentrates on Oslo as an urban tourism destination for disabled people.

The tourism and leisure industry is one of the most important factors in Norwegian economy which accounts for approximately 3.3% of the Gross Domestic Product (GDP) and 6.3% of total employment respectively. (Statistics Norway) Collected data and statistics show that there are 29.1 million visitors' spent nights in Norway in 2011. This is an increase of 2 percent compared with 2010 and more visitors will flow in the following years. (Statistics Norway) To receive a big number of tourist inflow, accessible tourist facilities and services are needed from transports to main attractions in Oslo. It also indicates that there is a need to provide accessible information and innovative ideas within this urban tourism destination for a better way of managing different tourism segments according to the Universally Design Principles. (Statistics Norway, 2011)

1.1 Research Problems and Aims

The aim of the research is to assist in improving the planning to and addressing the needs of visitors with disability. The aim is to help investigate and understand the needs and demands of an increasingly significant market through making a conclusion of successful factors of accessible tourism in Oslo and give recommendations for current and future development through data collection and cases studying.

The core research question for this thesis is to study how accessibility can be improved or developed to meet the needs of a variety of visitors in an urban city. Based on the core research question, three basic research questions are listed below to be described in detail;

RQ 1: How to define disability and universal design?

RQ 2: What is the accessible tourism situation in Oslo and how could it be improved?

RQ 3: What are the successful elements that have been done for accessible tourism and what are expectations for future?

1.2 Research Methods and Evaluation Criteria

This thesis is to insert primary data collection method and project approach. Firstly, the project method is needed as the writing process might need some data collected from the previous projects done in the relevant area. Because of some limitations, the primary data will be quantitative and qualitative based which include the reliable statistics and sources from World Tourism Organization, European Network for Accessible Tourism, Statistics Norway and related sectors that gave a good overview over the existing state of demand and supply side of barrier free tourism. Furthermore, related legislations and journals are used to describe the concerning topic accessibility, as tourism and leisure are qualitative experiences, different people have different feelings. Six places in Oslo will be observed and analysed to present

current situation of barrier-free tourism. Creating and delivering new ideas for developing and improving the facilities and services of accessible tourism are required in the end. In addition, all the cases in this thesis are evaluated according to Accessible Assessment Criteria which an assessor measures certain aspects of the business to assess for mobility, hearing and visual accessibility. The evaluation criteria are in four levels (Accessibility Assessment Criteria 2012):

1. Excellent (fully accessible independently or with a helper);
2. Good (partially accessible independently or with a helper);
3. Poor (lots of barriers, a customer needs lots of help);
4. Impossible (lots of barriers, the place does not suit for a disabled customer).

1.3 Research Limitations

In this thesis, three parts with six cases including gateways (airport, central railway station), means of transports and main attractions are studied. Since the individuals have different kinds of needs for accessible facilities and services, it is hard to analyse every individual's needs. Therefore, the research was limited to the following 4 tourist groups: wheelchair user; visual impairment, hearing impairment and asthma and allergies; aged visitors and family with children. Elderly tourists as a big group will be focused on during the research. The facilities and services are also checked based on Norwegian Standards.

1.4 Thesis Structure

This thesis is divided into seven sections. The first chapter gives an introduction to the research background and why the topic was chosen. Then the research questions and aims are stated and the research methods are presented, research limits are also given. Further it is explained how the thesis is structured in more detail.

The second chapter concentrates on disability in worldwide extent and in Norway. It first defines the term disability and gives a statistic review of global disability situation. The relationship between disability and aging is explained in detail to analyse the situation in Norway. The living situation of disabled people in Norway is presented in the end of the chapter based on the collected data.

The third chapter deals with accessibility and universal design principles at the beginning, some typical signals are presented to explain the global standard of universal design. Furthermore, the relationship of human rights and accessible tourism is introduced. The definition of accessible tourism and target market are deeply analysed as well. At the same time,

an overview of Norwegian Universal Acts with related legislations are presented to tell the importance of universal design for the independent life of disabled people. A detailed Norwegian Standard for accessible tourist destination and current situation are given at the end of the chapter.

Case studies of accessible tourism suppliers in urban city Oslo are shown in the fourth section. Six cases were studied from gateways to famous attractions which give data collection and observation. Then according to this learning and analysis, a conclusion of success factors are given and additional challenges are given for the macroscopical level. Furthermore, a future outlook based on “Norway universally designed by 2025” is given in chapter six.

Chapter seven summarizes the study and presents the conclusions drawn from the results found in the other chapters. The limitations of the research and the personal opinion of the author are presented.

2 People with Disability

Most people when they think about disability, an image of wheelchair just immediately comes to their minds, however, people with wheelchair is a kind of disability, but it doesn't mean wheelchair equals to disability. People with disabilities represent on many aspects. According to World Health Organisation, “disability is any restriction or lack (resulting from any impairment) of ability to perform an activity in the manner or within the range considered normal for a human being”. This definition explains disability generally, the International Classification of Functioning, Disability and Health (ICF) gives the detailed explanation which defines disability as “an umbrella term, covering impairments, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives”. ICF's definition is not limited in the body function. Disabled people in the social environment can be understood so that disabled persons are those persons who are not able to sustain regular social relationships; acquire and perform employment and achieve a reasonable and adequate income. Therefore, disabled people cannot join these social activities without assistance.

With the definition of disability it is not difficult to find that disability is a part of the human condition - almost everyone is temporarily or permanently impaired at some point in life, and those who survive to the old age will experience increasing difficulties in functioning. Within the special character, people need to put more efforts to help disabled people both in physi-

cal and social aspects. Giving enough respect and equal rights are the initial requirements and then building standard accessibility is important.

2.1 Statistic Review

Disability is a matter of concern in the worldwide context in developing countries and in developed countries. In general, across the world, disabled people are facing a lot of problems everyday, such as discrimination, unaccessible facilities in public places and lacking provision services. These phenomena lead to new problems, such as poorer health outcomes, lower education achievements, less economic participation and higher rates of poverty of disabled people. (World Bank 2012)

A new report was presented in the end of 2011 by WHO (World Health Organization) which shows the current data about how many people suffer from disabilities worldwide and what problems arise in their everyday life. It is presented in the report that more than a billion people are estimated to live with some kind of disability, which equals 15% of the world's population (based on 2010 global population estimates). Compared to 2004, 650 million people are concerned with disability worldwide which has increased approximately by 40% in six years. Looking into detail, according to the World Health Survey around 785 million persons 15 years or older live with a disability and 110 million people have very significant difficulties in functioning with a growth to 90 million people from 2004. However, there is also a widespread agreement among experts in the field that disability is more common in developing than in developed nations. As presented from World Health Organization, 528 million people live in Asia, Africa and South America which account for about 81% of the world disabled people; Europe and North America share the rest part with 9.02% and 9% respectively. (WHO 2011)

Norway is not an exception within the worldwide tendency. According to the data collected by Statistics Norway and Norwegian Ministry of children, equal and social inclusion, there are 30% of disabled people have a mobility impairment which account for 1.5 million people. As can be seen in figure 1, 24% people suffer from chronic problems like allergies, asthma, diabetes and pain which take the highest rate of disabled population. The group of people suffering from mental illness and sensory impairments are the next highest rate with 11% and 10% respectively. Then about 8% people do have cognitive difficulties and 16% suffer from other types of mobility restrictions. Naturally, it is possible that one person suffers from a multitude of handicaps. (Statistics Norway) Experts' opinion about growing disabled population is an inevitable trend in the world. (Statistics Norway, 2011)

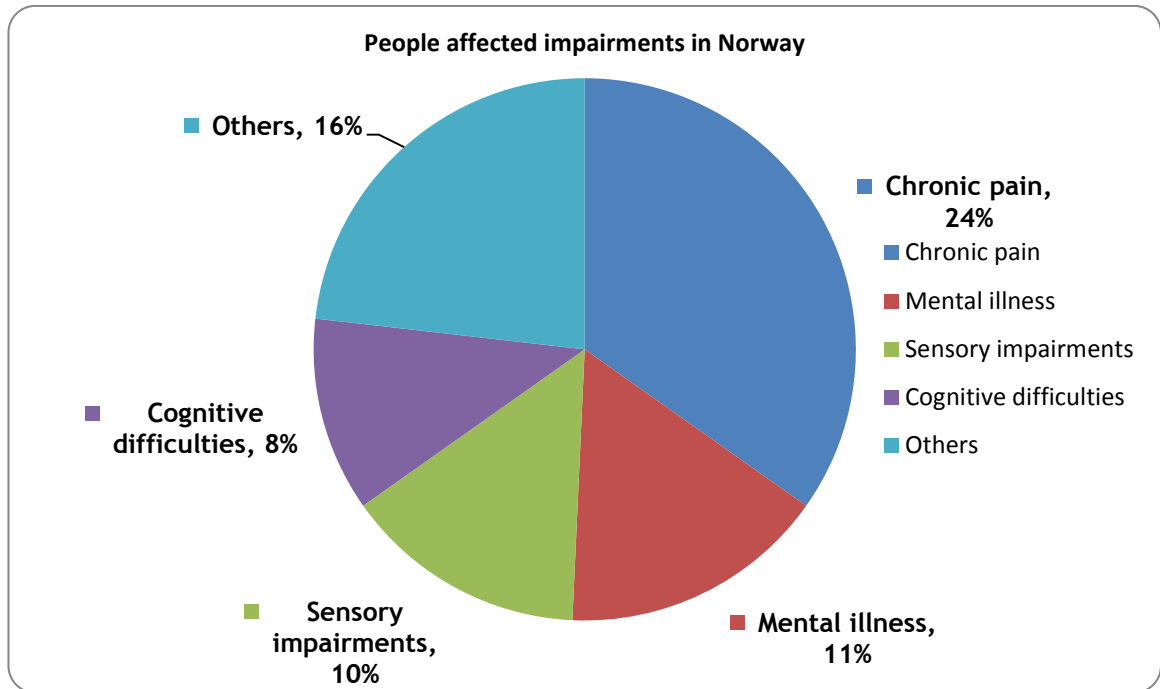


Figure 1: Own illustration after Statistics Norway (Statistics Norway 2012)

2.2 Correlation between Disability and Aging

As mentioned before, growing aging population is the world tendency. Many authors and organisations have supported the view that ageing and disability have strong correlation (Schmidt 2004; Gerlin 2005; Bloch 2000; United Nations 1990). The strong and positive relation between ageing and disability globally is also noted by the United Nations Disability Statistics Compendium. (United Nations, 1990) It is estimated that there will be one billion people worldwide who are 65 years and above by the year 2030. This unique set of aged people regarded as senior citizens of a country will require accessible facilities during this age period. (NIA 2009) As aging people have a high potential risk to have a form of disability, therefore, the aging population takes a big proportion of disability population. At the same time, the high risk of getting a form of disability for old people is 14 times higher than they are as four-year-old. (Buhalis & Darcy 2011, 5) In conclusion, rising aging population is the main reason of growing disability population, taking Europe as an example which has the highest aging population rate in the world. Eurostat made a survey among 25 European countries in 2003 to show the relationship between age and disabilities and a graph was given to explain the details in figure 2.

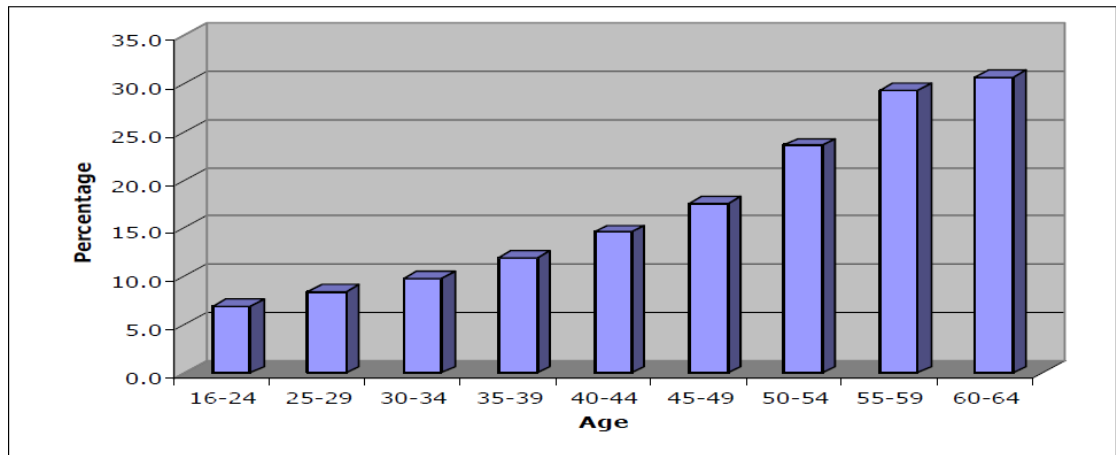


Figure 2: Correlation between age and disabilities in 25 European countries (Eurostat 2003)

(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)

The graph shows that 30% of the population aged 60-64 has a kind of disability compared to 6% of the population aged 16-24. The statistics tell an inevitable fact that the aging group is facing reduced function and increasing disability. Through analysing the data of aging population of Norway, it is not surprising to find the same situation as showed in the graph. As estimated by a comparable survey of EU-SILC, 20% of Norwegians aged 16+ had a limiting long-standing illness or disability, 17% among men and 24% among women. The proportion increases with age, from 9% (16-24 years of age), through 26% (45-67 years of age) to 42% (more than 79 years). (Statistics Norway, paper 2008/39) The statistics above prove that elderly people present more disabilities than younger population and experts agreed that in the future the number of disabled people will increase with the fast rising aging population.

Disability brings uncomfortable and inaccessible situations for disabled people which are also indicated in Health Interview Survey of Statistic Norway. (HIS) People with disabilities were asked about the most difficult part of daily life faced. More than 18 % stated that they have problems with leisure time and 20 % have difficulties when going out in winter time. The survey gives a strong need to be concerned and improve the quality of living situation by adapting facilities and services for disabled people and aging population. A fact was told in the survey that elderly people suffer from more disabilities and represent an important customer segment for accessible products and services.

2.4 People with Disability in Norway

Norway is a typical European country facing the same problem with many other developed countries in the world. However, disabled people or elderly people live in an environment with fully care and convenient facilities. Disabled people in Norway live in a peaceful and comfortable community which is built basing on the anti-discrimination legislation and the universal design. Disabled people in a wide sense, particularly some intellectually disabled people, live in group homes which consist of units where each person has a full apartment, with bedroom, kitchen, bathroom and living room. Most group homes are on residential streets integrating impaired people into the mainstream society, and some group homes are criticised for a location near nursing homes or other long term care facilities. (Jan Tøssenbro, 2009)

The high living standard of disabled people in Norway builds on Anti-Discrimination legislation and universal design. With these premises, disabled people get enough respect and equal treatment. In Norway, several departments of the government have the responsibility for disability law and policy, for example, Ministry of children and equality (Barne- og likestillingsdepartementet) and States råd for likestilling av funksjonshemmete (SRFF) (The Norwegian State Council on Disability) which co-ordinate disability policies. Additionally, some independent agencies are also promoting and enforcing equality and anti-discrimination legislation in Norway, for example the equality and anti-discrimination ombud (LDO) (Likestilling og diskrimineringsombudet) and the Norwegian equality tribunal (LDN) (Likestillings- og diskrimineringsnemda). With the supervision and protection from these departments, disabled people have the same basic rights with normal people in working places and public activities.

3 Universal Design and Accessible Tourism




People with disability need to be respected as different; however, they also need to be acknowledged as members of mainstream society, with all the rights and opportunities. Hence, accessibility was introduced to describe facilities or amenities to assist people with disabilities. In other words, to be “accessible” means buildings, outdoor areas, technical installations and other facilities which are designed and built in such a way that they can be equally and easily used by all members of society, including people with reduced mobility. A well designed accessible infrastructure is the basis for obtaining equal rights which is called universal design. At the same time it ensures tourism products cater for all market segments. Realising the importance of accessibility and universal design, experts from North Carolina State University expounded seven principles of universal design which gave a guideline for product development, environmental planning and communication. The universal design principles include according to Center for Universal Design (1997) the following:

1. Equitable use

2. Flexibility in use
3. Simple and intuitive
4. Perceptible information
5. Tolerance for error
6. Low physical effort
7. Size and space for approach and use

3.1 Accessibility and Universal Design

Universal design principles are considered from the perspective of disabled people about the required degree of sensitivity, clarity, safety and convenience. They are also broader than those of accessible design and barrier-free design and widely used for setting standards and implementing accessible infrastructure especially for the tourism industry. For example, accessibility provides handrails, ramps, lifts and lowered counters for people who have physical impairments using wheelchairs or walking aids. People with sensory impairments including hearing and visual problems can be accessed with tactile markings, signs and labels, hearing augmentation systems and audio cues for lifts and lights; and then communication access is needed for people who have difficulties in writing words, giving speech and understanding foreign languages. (Darcy, 1998) Besides the physical access, accessible information is also seen equally important with other kinds of accessibility. For people with different kinds of impairments, information should be given in verbal manner with visible notice board or electronic media and some universally accepted signs and symbols are shown in the figure 4 table below. (Accessible Tourism 2011) Accessibility brings possibilities for disabled people, however, access for all is still difficult to reach because of the overwhelming limitations. Norway is known as a winter country and there is no efficient way for people walking in the icy roads.

Signals	
	Wheelchair user access
	Audio description for people with hearing problems
	Hearing loop or audio induction loop


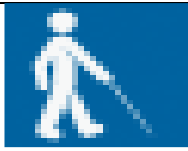


	Text captions for TV and website
	A clear path for blind or low vision people
	Braille for blind tourist
	Sign language for people who cannot speak

Figure 3: Universal accessible icons (Design for all Europe 2012)

The concept of universal design has been an important issue in Norway for the last decade and now is growing in importance. And it is already used in existing and new laws and regulations, actions plans, county and municipality planning documents and standards. As stated by Norwegian ministry of the environment in 2006:

“Universal design is a planning principle that should form the starting point for all planning in county municipalities and municipalities. Universal design can be used for both the preparation of plans on all levels of detail, from the preparation of an overall master plan right down to the most detailed level of planning, and for the design of constructions and buildings”

In the past few years the government and ministries have amended several Acts and regulations in order to ensure universal design and increased accessibility. From the existing acts and regulations it is not difficult to find that barrier free buildings and outdoor facilities are the first step to ensure that disabled people have equal participation in the society. There is a compelling request that all school buildings must be accessible and there is no exception from kindergartens to universities. Besides school buildings, all the buildings in Norway including prisons and refugee camps should be constructed or adapted for impaired people by some standard. For example, buildings should be adapted to the local topography and designed to allow access without steps. Outdoor areas and transport are as important as build-

ings which need to take special measures in consideration, on the other hand, universal design also benefits the people without disability which brings more convenience, for example, people with prams will find wheelchair-accessible surroundings much more easily accessible. (Ministry of the Environment, Circular T-5/99E Accessible for all)

The instruments including welfare benefits for living, medical treatment and rehabilitation, technical aids, housing and education used to enhance the participation and equality of disabled persons in society have been applied for many years in Norwegian society. Nowadays, increased emphasis is being placed on incorporating considerations relating to disabled persons into other areas as well. Particular attention is being focused on the challenges associated with planning and design of physical areas, transport and information. For example, all new ICT and existing ICT intended for the general public need to be universally designed. People with disability are accessible for skiing with special designed equipment and surroundings (Norwegian ministry of environment). The higher standard of accessibility brings more economic benefits, as well, which is strongly embodied on tourism industry. However, accessibility and universal design need a broad range of stakeholders including governments, national agencies, nongovernmental organizations (including charitable and faith-based organizations), and the private sector have roles to play. (WHO 2011)

3.2 Human Rights Approach to Accessible Tourism

Looking back to the history, the appearing of accessible tourism is related to the development of human rights. It is unnecessary to go further back than the World War I and World War II conflicts in analyzing precursors of accessible travel which impelled governments in the United States and Europe to provide benefits and services to returning veterans with disabilities. These facilities and services provided at that time were segregated, but helped to foster a sense of disability identity or community so important to the later struggle for equal rights (Heumann 2003). After 20 years of efforts it was first mentioned by the UN Human Rights Convention that people with disabilities were specifically identified in a declaration with the subsequent actions and declarations reinforcing that people with disabilities should enjoy the same rights of citizenship as those without disabilities. Afterwards many countries introduced their specific disability discrimination legislation under their own legislative and policy frameworks. (United Nations 1975, 1976, 1993)

Based on legislations of the UN Human Rights Convention, another international organization which called the world tourism organization (UNWTO) became responsible for the promotion of the concept of accessibility and tourism for the first time (Manila Declaration 1980). This was an important milestone in the quest for accessible tourism for disabled people and the members of UNWTO were recommended to legislate tourist service. With two decades' de-

velopment, “Creating Tourism Opportunities for Handicapped People in the Nineties” (UNWTO 1991) and “Tourism for all” (Baker 1989) were published which summarised the progress achieved for promoting access to tourism by everybody, regardless of age, social or cultural background or disability. In Europe, many organisations were established to support accessible tourism such as European Network for Accessible Tourism (ENAT) which supervises the implementation of the accessible regulations and strengthens the awareness campaign among its members.

Disability rights in Norway are based on the UN human rights Convention which aimed to ensure that people with disabilities have a full and equal right to realise their human rights. The principle of normalisation has been politically supported in Norway for nearly four decades. This implies that residential institutions have been regarded as unwanted, but also that generic services and the general legislation should be the basis of the support for disabled individuals. There exist a few laws and regulations that specifically the targets for disabled people and only for disabled people. (The Norwegian State Council on Disability)

3.3 The Target Market

With the development of sociality and the increasing needs of special groups, accessible tourism as a concept has already been entered everyday life. Darcy & Dickson, the experts of this area defined accessible tourism in their book in 2009 which focuses on the accessibility in all components of the customers’ information-need chain, the transit and the destination. “Accessible tourism enables people with access requirements, including mobility, vision, hearing and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed tourism products, services and environments”. There are benefits not only for disabled people but also for people with limited mobility such as pregnant women and temporary injured people.

The key point of the definition is disabled people in narrow sense and in wide sense should have the same right for travelling like normal people and all the tourism products and services should be accessible for disabled people especially in tourism destinations. Universal design is also mentioned to meet the special needs. Speaking concretely, entrepreneurs who run the tourism related businesses should adapt the facilities and services to make them accessible for disabled tourists. The local government takes consideration of accessibility when applying infrastructures. At the same time, human rights related legislation should be treated seriously to protect the legal rights of disabled people. Accessible tourism should never be isolated since its appearing, the development is drove by many social factors.

There is no definitive answer for the question “how many disabled people travel”. However, there is a definite trend that more and more people with disabilities are joining in the tourism industry and the number will be doubled by 2020 with the increased aging population. As estimated by Statistics Norway that 22.9 million trips with at least one overnight stop were made by Norwegians in which 50 percent of tourists are aged from 45-79 in 2010. The big numbers of disabled people worldwide take significant account of the accessible tourism market. It has been estimated that there are around 650 million people with disabilities worldwide and most disabled people in developed countries have money to travel especially the elderly people. As disability increases greatly with age, elderly people face more access barriers and have special requirements depending on the type of impairments. A previous study by Dwyer and Darcy showed the situation of disabled people participating in travelling with different types of impairments in Australia. (Darcy, S. 2004. *Disabling Journeys*)

The individual level of impairment above requires different needs which bring a heterogeneous market for accessible tourism, for example, ramps are needed for wheelchair user but not for visual impaired customers. Even, two wheelchair users can have very different needs according to their particular health situations and ages. Hence, knowing the target group enables suppliers to deliver suitable products and services for customer. There are 7 main types of impairments are identified as main obstacles during the travel and those people are the target customers for accessible tourism. (OOSATE 2005) The first cluster includes people with varying levels of impaired mobilities from wheelchair users to crutch users. Blind or partially sighted individuals and deaf or partially hearing individuals take the second and third places. The following cluster consists of people with conveying, understanding, or using spoken, written, or symbolic language. Mental or intellectually impaired individuals are seen important as well as travellers with hidden impairments which include heart problems, blood pressure or circulation problems, breathing difficulties, stomach, liver or kidneys problems and other potential diseases. The last cluster forms the largest market of accessible tourism which presents the elderly individuals who often suffer from one or more of the above disabilities. The different individuals lead to different demand types of accessible requirements which represent a combination of challenges and opportunities for the travel and tourism industry. As proved in a previous study by OSSATE, people with familiar disabilities have low to moderate access needs which make up the vast majority the mainstream providers are always chosen. That is because the widely utilized of universal designed facilities and services in mainstream providers. People with temporary disability do not often see themselves in need of special services. People who suffer from two or more disabilities especially the seniors always ask for specific and highest level of accessibility services, thus a more specialised provider with profound knowledge is also looked for during the travel. Figure 4 below from OSSATE Accessibility Market and Stakeholder Analysis, 2005 showed key variations of demand types for the disabled and the elderly population that require accessibility.

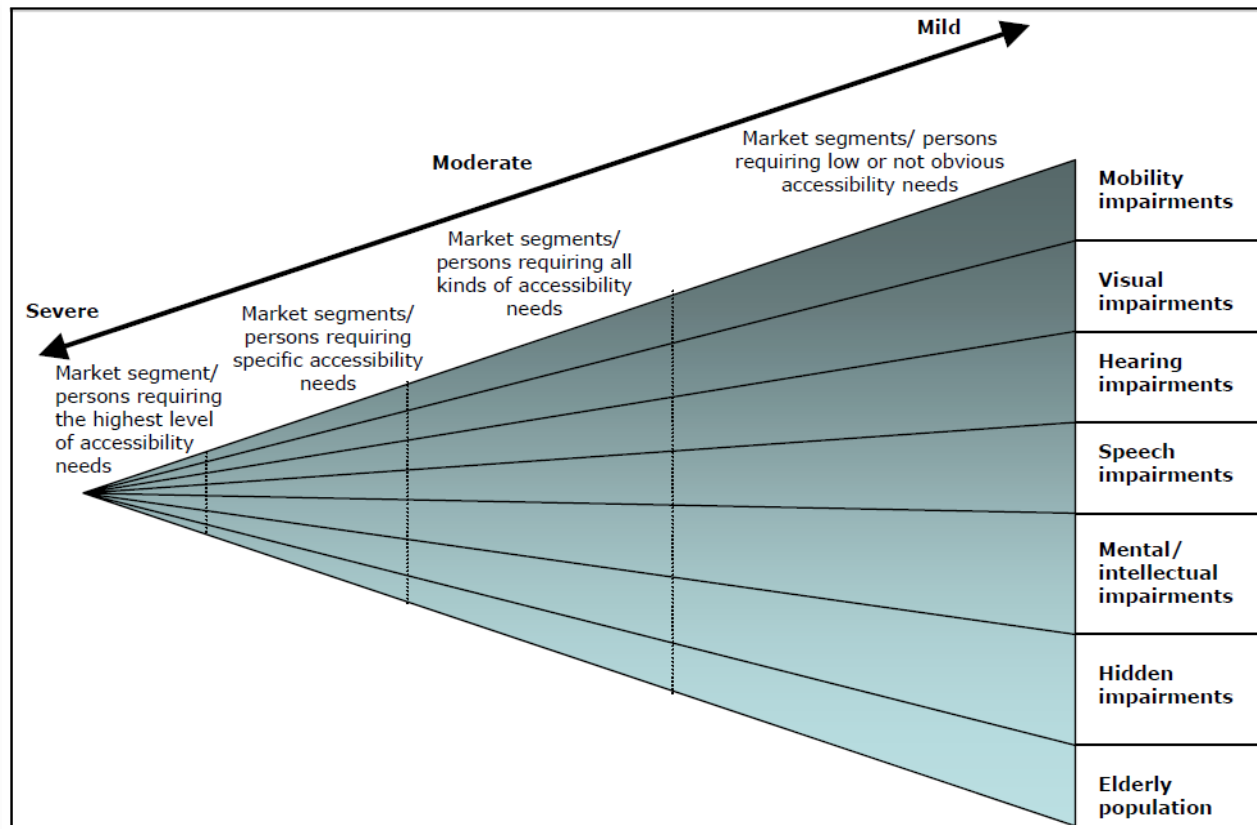


Figure 4: Pyramid of demand types

(OSSATE, Accessibility Market and Stakeholder Analysis 2005)

The higher standard of accessible facilities and services are widely needed to be implemented in tourism industry to fulfill the all kinds of market segments. However, as special customers, disabled travellers have differences with normal visitors in motivations and plan decisions. Travel motivations are an important part of the travel process and occur before the actual travel planning. Compared to normal people, disabled people treat health aspect as a far greater role, improving one's health is always the main motivation for disable people when thinking about travelling. On the other hand, disabled people share the same motivations with normal people which include relaxing, recharging batteries, freedom and experiencing nature. Elderly group seems has more motivations to travel like social interaction, physical exercise, and learning (BMW 2004). After the motivation stage, most travellers move to planning stage. People usually abandon ideas if there are no enough information and too many barriers especially for disabled people who rely much on detailed information of special facilities and services. Disabled customers use different sources and different search mechanisms for gathering travel-related information and the Internet is used more and more frequently during the planning. However, some providers' overstate and unreal information misleads the disabled customers. Therefore, to attract these market segments, the adequate provision of information is crucial.

3.4 Norwegian Standard for Accessible Tourist Destination

Standards Norway and the Delta Centre in the Norwegian Directorate for Health and Social Affairs are responsible for developing accessible tourism and accessible standards in Norway. Great attention has been paid towards making accessible facilities and services in the tourism industry for disabled people in the past few years. However, with the increasing disabled population and extending market, there is a need to develop a national labelling system for accessibility in the tourism industry.

To apply a quality system, the New Norwegian Standard, NS 11010 “Accessible tourist destinations - Requirements as a basis for a labelling system” published by Standards Norway was used as an important tool and guideline. The new Norwegian Standard, NS11010 set minimum requirements for four categories of users with the following disabilities which include walking problems and arm and hand impairments; visual impairment ; hearing impairment and asthma and allergies. These four categories present the main customers of accessible tourism. After analysing the characters and features of different kinds of disabilities, a series of special demands and needs are listed by Norwegian experts.

For disabled tourists in the first category with walking and arm impairments, the basic accessible requirements are smooth floors without slopes, easy-to-open doors with sufficient clear width, sufficient spaced passages, suitable heights, wide lifts, accessible toilets, dedicated parking spaces, devices that can be operated without great muscle strength, devices that can be operated with a stiff wrist and more than a finger, appropriate positions and sizes of buttons, switches, etc. People with visual impairment fall on the second category which need special cares that include simple, logical layout of indoor and outdoor environments, tactile and visible marks in front edges of steps, changes of direction, entrance doors and lifts, handrails at ramps and stairs, contrasting colours, non-glare lighting, sound and tactile systems. The third category presents hearing impaired tourists who have a large demand on sign language, visual orientation in a certain way, appropriate lighting, and text or other visual equivalents, reduced background noise and induction loop systems. The last category was also paid attention to by experts with some following requirements: raw materials chose in appropriate way, good ventilation inside the room, cleaned aeration and ventilation systems, air conditioning systems and hot-air heating systems at regular intervals, thorough cleaning, detailed and accurate information about raw food and equipment inside.

Based on these special demands and requirements from disable tourists, 14 main areas of tourist destinations within 107 requirements concerned with four categories are listed in NS 11010 to help the tourist destinations improve the accessibility for guests with different kinds of disabilities. As mentioned before, universal design has already been applied in Norway for

many years; the NS11010 made some adaptation and added some new requirements for special needs which were applied in parking; access to the main entrance, ticket office; entrance; reception; information, service and safety; corridors and passages; doors; elevators; lavatories and bathrooms; overnight accommodations; kitchen connected with the overnight accommodation; restaurants, conference rooms, etc.; cleaning and adventure. Taking parking area as an example, 15 requirements are presented in NS 11010 with 10 requirements related to people with walking problems and arm and hand impairments and 11 requirements related to people with visual impairments. (ISO Management System 2008)

European figures show that including accompanying friends and family members there are 134 million people with different levels of requirements ranging from severe to low or mild. Oslo as a small destination in Europe shares the potential market. To create a brand image of Oslo as an inclusive, warm and welcoming destination, another project was implemented to figure out the detailed information of accessibility in Oslo by VisitOSLO, a marketing organization in Oslo which cooperated with Delta Centre and Tellus IT and got advices from the Norwegian Association of the Disabled, the Norwegian Blind Association, the Norwegian Deaf Association and the Norwegian Asthma and Allergy Association. The result of the project was checked by OSSATE to reach the level of conception "Europe for all". (Bodil Sandøy Tveitan, VisitOSLO, Norway)

4 Case study in Oslo

Six cases are chosen in this thesis by observation the facilities and services. At the same time, related materials are also found and analysed. In addition, pictures are taken for deeper analysis and thesis presentation.

4.1 Gateways

The gateway is the place where tourists first arrive and pass when visiting the tourism destination. Hence, gateways can be airports, railway station and harbour. Tourists arrive in Oslo mainly by airplane, train, car and ship. As the capital and the biggest tourism destination of Norway, Oslo has three airports, central railway station and a harbour for cruise visitors. In this thesis, two gateways are checked by observation which is Gardermoen airport and Oslo centre railway station. Because of the budget limitation, the cruise ship and harbour are not chosen for this thesis.

4.1.1 Gardermoen Airport

Gardermoen airport is the largest airport in Norway with direct routes to more than 110 Norwegian and international destinations. This modern airport which opened in 1998

is located at Gardermoen in Ullensker, 47 km northeast of Oslo. At the same time, it's one of the busiest airports in Europe and last year there were more than 21million passagers travelled through the Gardermoen airport. (Oslo Lufthavn AS, 2012).

Gardermoen airport provides barrier-free facilities and services for passangers with wheelchair, impaired mobility, impaired vision or blind, impaired hearing or deaf and communication difficulties. They are also recommended for families with young children and seniors. The terminal is totally universal designed. For wheelchair users, wider access pathways, automatic doors and ramps are applied throughout the airport which creating a complete physical access as well as elevators, wheelchair-accessible telephones, ATMs, and toilets. These facilities are all designed in some height and a special system also installed for electronic wheelchair charging. Similarly, for visual and hearing impaired people, the terminal's arrivals and departures boards use clearer fonts and larger text, while all the lifts inside the airports provides braille and tactile buttons, as well as for telephones. Clear and simple signage throughout the whole airport, and there are about 30 recliner thin-padded leather chairs made for travellers who have to spend nights in airport on the ground floor outside the security. In parking area, there are 49 disabled parking places in two parking garages and six outdoor parking areas. Reserved spaces for loading and unloading of larger vehicles for the disabled can be found in front of the terminal. In addition to the adapted facilities for disabled travellers, Gardermoen airport also established an assistance service to help passengers with various assistances needs which covers mobility impairments, visually impaired and handicapped and children travelling alone. Trained staffs can be found at information desk, while wheelchairs and prams are provided for travellers throughout the airport.

Besides the accessible facilities and services in airport, Gardermoen airport has diversity arts with high architectural quality for all passengers which varying from pieces of sculpture, to the multi-coloured fabric piece. Another impression for universal design is known as 'Sound-Showers' which combined the Norwegian design and entertainment together. Those arts bring entertainment and beauty for customers.

As a conclusion Gardermoen airport has excellent accessibility for passengers and meets almost all the special requirements of disabled people and people with limited mobility. It is now one of the most accessible airport in the world, with the rising number of passengers every year, Gardermoen airport plans to expand by 2017 which will be achieved through expanding the terminal with new departure and arrival areas and a new baggage handling facility. At the same time, passengers will have more space both before and after the security checkpoint and short walking distances to both domestic and international flights by expanding, several new centrally located toilets and baby care rooms as well. All the plan and implementing will focus on easy access and universal design. Beside, new food and drink outlets

and more and larger shops will improve services as well. (Expanding towards 2017) The current facilities and services are perfectly accessible for disabled passengers, however, the expanding plan would make Gardermoen airport reach a higher level of accessibility and attract more tourists.

4.1.2 Oslo Central Station

Oslo central station is situated in the city centre and it is also the biggest station in Norway. From here, tourists can find their ways to all over the Norway and trains from Norway to Sweden can be found as well. Trams and some city buses stop outside the station and airport express trains depart every 10 or 20 minutes. (NBS's entry on Oslo Central, 2012)

It provides many kinds of services for passengers. Inside the building, the waiting room opens from 4:30am-01:00am which convenient for customers who take the night train. Trollys and storage boxes can be found for customers with heavy luggages. Accessible toilets and baby changing room also applied inside the building for wheelchair user and parents with babies. There is a big information screen with large text in the middle of the hall, tourists can get timetables easily and visual impaired people also can read by coloured texts. In addition, accessible lifts and ATMs can be found inside the building. Maps and tourism information brochures are free in Oslo central station. Clear signage throughout the whole station and provides guidelines for tourists in Norwegian and English. In platform, there are shelters for passengers which is specially designed with a top environmental profile, and based on modular components that enable users to tailor it to local conditions. Ramps applied in platform for wheelchair users and people with reduced mobility. In addition, Oslo Centre Station connects the biggest shopping in Oslo, especially in winter time; tourists do not need to walk outside. The information desk inside the hall offers services to everyone and trained staffs for disabled people in Oslo central station provide assistance and special services that should be booked earlier. Furthermore, detailed accessible information are presented on the Internet, disabled tourists can check if there are suitable facilities and services.

Oslo central station has good accessibility for customers with accessible facilities and assistances for different requirements. There is a plan to rebuild Oslo S by 2015 and the aim is to fix in detail and make it accessible for all.

4.2 Transports

An accessible transport system requires there to be accessibility in every part of the travel chain from information on transport alternatives, the journey to/from, any stops at stations and bus stops, and means of transport itself. Tourists' exploring Norway's capital via bus,

subway, tram, ferry and even bicycles by well-organised public transport system in Oslo. Each transport has good connections and allows tourists easily switch between different modes of transport by the same tickets used in the whole system. In this thesis, two means of public transports in Oslo are chosen.

4.2.1 Subway

The subway network consists of six lines with 105 stations in Oslo (). All subway stations are easily identified with blue and white in colours, circular and with a T in the centre of the stop board, so that 'T-Bane' is known as subway in Oslo. The subway in Oslo is quite modern and specially designed for disabled people with a good level of assistance. For stations, there are 105 subway stations of which 16 are underground or indoors. Accessible lifts can be found in stations for wheelchair users, also for visually impaired and blind people. Besides, lifts that provide step-free access from street level to platforms and "guideways" used in the surface of the floor. People with hearing and visual difficulties, loudspeaker systems are used when the train is late or delayed, static information at concourse level displays on platforms There are some security systems at stations for all passengers like emergency call points (also accessible for wheelchair user) and CCTV (Closed Circuit Television) surveillance. The trains are new and modern, accessible facilities applied on the trains for wheelchair users including low-floor train boarding, priority areas with enough space near the door, call points in appropriate height for wheelchair users as well as ticket dispensers and validation machines, anti-trapping device on door edges and appropriate handrail placement, even a folding seat for companions. For parents with prams and push cars, there are reserved spaces with blue signal on the ground. The same situation for people with bicycles on the train. For visual-impaired and hearing-impaired persons the special arrangements installed inside the train are: information signs and displays on-board trains, inductive loops at call points, light signals when door closing and information pole display at entrance. In every station, tourists can get timetable brochure and subway map freely. In addition to that there are trained staffs on board to give assistant for individual requirements. Moreover, all the accessible information can be found on official tourism website (VisitOSLO) which is quite convenient for disabled traveller to make their decisions and plans.

As to the subway in Oslo the access by mainstream disabilities has still some limitations. A wheelchair user and people with a guide dog is not easy to go inside the train when they are full of people inside the train especially in peak hours. Ideas for solving this problem came from a previous experience in Japan where there is a women-only separate cabin in metro. For this case, a separate cabin for disabled only would be a suitable solution.

4.2.2 City Bus and Tram

Bus and tram are the main public transports in Oslo for tourists, almost all attractions and accommodations are reached by bus and tram, good connections with other transports like subway and ferry as well. Like the trains used in subway, there are adapted buses and trams based on universal design with accessibility for disabled people.

For wheelchair users, the door in the middle of the bus is wide enough for a wheelchair as well as for prams and push cars. A kneeling system in combination with ramps or lifts is applied on a tram which allows an easy boarding. Inside the bus and tram, there is designed area for wheelchairs and prams with folding seats for companions and parents. There are at least four priority seats in a bus and tram available for persons with reduced mobility close to the accessible door. A special button on designed area at a suitable height for wheelchair user and prams when they want to get off the bus or tram. In addition, a restraint system installed in order to warrant the stability of the wheelchair. Handholds or handrails which are adjacent to priority seats are designed in such a way that they are allowing the passenger to grasp easily. There are no "chair legs" under the seats so that a guide dog has space to stay. Armrests are easy to move out and fit on seats between the seating position and the gangway. There is adequate lighting inside the bus and tram that provides safe boarding especially in winter time for people with visual impairments. Winter in Norway is cold and dark; there are a few hours light in the morning and afternoon that brings inconvenience and potential risks for disabled people. Communication devices adjacent to priority seats and within wheelchair area are accessible for wheelchair users and the control for all internal communication devices can be operated within the palm of the hand and a contrasting color for visual impaired people. The bus driver also plays a role as assistance for disabled people especially in winter time, ice and snow may bring difficulties for disabled people and assistance would be important and helpful. On main bus stations, information screens are used for passengers to see when the bus or tram come, tourists can also find big maps at stations which show the detailed routes of different buses and trams. However, most stations are not wide enough for wheelchair users and that is a disadvantage. Furthermore, the detailed accessible information also can be found in official tourism website which is called VisitOSLO. The website is accessible with text captions for visual impaired people and that makes tourists get easy and trustworthy messages for decision making and planning.

Generally speaking, bus and tram in Oslo are accessible tools for most tourists, but still some detail parts and things can be discussed and adapted. According to the Ministry of Transport and Communications is the means for developing a transport system that as far as possible can be used by all, without the need for adjustments or special facilities. In order to achieve the goal, all new infrastructures should be designed according to the principle of universal design. And for the existing stations and transport modes, substantial requirement and adap-

tion are needed. A trained bus driver is also important for providing assistance for anyone who needs help. As known that accessible for all is a big challenge, individuals have different special needs and cares. However, a fully universally designed public transport system will be developed gradually. (Norway universally designed by 2025)

4.3 Main Attractions

In urban cities the tourist attractions are places of interest where most tourists visit which are historical places, monuments, museums and art galleries, and national parks. In Oslo, there are many choices for tourists from the Nobel Peace Centre to Vigeland Sculpture Park. In this thesis, the level of accessibility of two main attractions in Oslo are analysed by observation. The Nobel Peace Centre and Vigeland Sculpture Park are picked not only by their famous reputation but also by the limited factors.

4.3.1 The Nobel Peace Centre

The Nobel Peace Centre is located in the centre of Oslo with city hall and Vesbanen shopping centre nearby. It opened in 2005 and attracted more than 400,000 visitors since 2010 by using multimedia and interactive technology, exhibitions, meetings, debates, theater, concerts and conferences, as well as a broad educational program and regular guided tours. (Nobels Freds-senter 2012)

As a modern and high-tech museum, the Nobel Peace Centre has also paid attention to accessibility and universal design. In parking area, there are designated parking spaces for disabled tourists with highlight coloured signpost indicating. Inside the building, automatic doors are used in main entrance and the door handle colour contrasts with door colour. Wider access pathways and ramps with single handrail or two-side handrails throughout the whole building and extra wheelchairs presented for disable people borrowing. Accessible toilets with audio emergency alarm call and ventilation system are used inside the building. Elevators inside the building meet the needs for different types of impairments by providing automatic door with infra-red sensors, comfortable space, braille and tactile buttons, audible signals and handrails. Besides these general accessible facilities applied throughtout the whole building, there are more special design in unique rooms. Contrasting colours are used for floors, walls, door openings in the Nobel chamber and a wall newspaper. 5 reserved spaces for wheel-chair users in lift available filmroom and tables and chairs are wheelchair-accessed in restaurant. Special meals also presented on menu for customers who ask for suger free, gluten free, lactose free, nut free and vegetarian meals in the restaurant. The last but not the least, enlarged font and easy read signals are provided for entrance, exit, direction to main facilities and rooms/areas.

Nobel Peace Centre offers special services and assistance for people with limited mobility, as well. The Personnel working in Nobel Peace Centre are trained in disability awareness and service dogs are allowed in establishment. Family with young children can get trolleys for children and non-smoking rooms and non-smoking area in restaurant for visitors with asthma or allergies. Not only the physical access in Nobel Peace Centre, but also the highly information access in Nobel Peace Centre is given. All the information is given by at least in two languages including Norwegian and English on brochures and website. Detailed information on accessibility can be found on “Oslo official travel guide” website.

Nobel Peace Centre is a totally accessible museum for disabled people or people with limited mobility. All the facilities and services are designed or adapted by Norwegian and European standards which have paid attention to details. It sets an example for universal design not only in Norway but also in the other tourism destinations. And it helps Oslo to build its inclusive image to all tourists.

4.3.3 Vigeland Sculpture Park

Vigeland Sculpture Park is another famous attraction in Oslo which is the life work of the sculptor Gustav Vigeland (1869-1943) with more than 200 sculptures in bronze, granite and cast iron and it is the biggest sculpture park in the world (visitOslo). Nowadays it is the recreational area for local people and tourists. Every year more than 1 million people come to visit Vigeland Sculpture Park. As an outside area, there are many limitations to apply accessibilities.

Norwegian government has some legislation about the accessibilities in outside area where Vigeland Sculpture Park is not an exception. There are two public parking areas in Vigeland Sculpture Park, one is in Eastside and the other one is in Westside. Each parking area has 50 parking places where only Eastside provides four designated parking spaces for disabled visitors which indicated by signpost and floor signs. The road from parking areas to main entrance of the park is accessible for wheelchair users, in other words, there are no steps and extra space for wheelchair passing. Accessible toilets with emergency alarm call can be found inside the park. Besides, it also provides special services for visitors with visual impairments and service dogs are allowed in establishment, visual impaired visitors have the possibility to feel and touch the statues. A playground inside the park is designed for small children that parents with children can spend some time there. Clear signage is provided throughout the park with site model, relief map and sign boards/panels. Also all the detailed accessible information can be found on VisitOslo this website. Generally speaking, Vigeland Sculpture Park

is accessible in some standard; however, as an open-air park with long time history in Oslo, there are many limitations in applying fully accessible facilities.

First of all, there are many stairs inside the park, most of them between the sculptures, in other words, stairs connect individual sculptures and make a community. There are no ramps for wheelchair users, so that people with moving difficulties are not accessible to see the sculptures on the top. Then there comes the second inaccessibility which is very typical in Norway. As known that Norway is a winter country and it is covered by snow for at least 5 months every year, roads become quite slippery and people have risks to fall down. This is the common situation in Norway, measures are used like putting salt and small stones on the frozen road, but it doesn't work so much. This unavoidable barrier exists in most countries and there is no efficient way to prevent this. Hence, Vegiland Sculpture Park is partially accessible for people with limited mobility.

5 Conclusion

After studying cases and data collecting, the current situation of Oslo shows that it is an accessible destination for disabled tourists from travel plan to travelling. All checked places and transports have good accessibility on average.

5.1 Successful Factors

There are some successful factors as concluded. Related legislation and universal design act are vital factors which play important roles when building the brand image. Public places, land, sea and air transportation, the outdoor environment and housing are all built to be accessible in high standard. For example, for houses, both the government owned public buildings (Nobel Peace Centre) and the private owned companies are all built according to The Norwegian building Regulations. "Life-time dwellings" is a kind of accessible houses/homes supported by the Norwegian State Housing Bank which stated that half of new built houses should be built for the use of disabled people. For outdoor areas such as land, sea and air transport are using non-binding characters as guidelines on accessibility. Sign language and "Straight Talk" are widely used for deaf people and people with communication problems. With the legislation and universal design act, most tourist attractions and transports reach the high level accessibility for tourists and locals.

The government measure is another factor to create accessible tourism in Oslo which is embodied in providing services to facilitate information and communication between persons with disabilities and other persons. For instance, text telephone with braille buttons for deaf and blind people; the e-mail system and some art exhibitions made accessible for blind persons; literature, news and magazines in braille/tape; sign language interpretation being avail-

able in most events and activities like theatre, some theatre even hire deaf or blind actors to help the disabled audiences. In addition, a special transport service allows people with disabilities use taxi and a specialized vehicle at 20-25% of the actual taxi fare. The local government or the national government is all involved in implementing the facilities and services throughout the whole country.

Qualified staffs are employed by these sectors to help disabled customers get better services. Disabled customers always have special needs. Knowing the characters and features of impaired people is important in security matters and in order to dismantle discriminatory attitudes as well as in raising the satisfaction of disabled travellers. Assistance and customer service is vital for all tourists both normal tourists and disabled visitors, training staff cannot be underestimated as a human factor. As known in Norway, the training staff in regards of the needs of disabled guests is a part of the existing education system. Hence, trained staffs also play roles in creating accessible tourism.

The Internet comes to be a successful factor with the development of technology. More and more people find and book tourism products and services on the Internet. The Internet as an information channel plays an increasingly significant role in the exercise of searching and decision making especially for disabled people. With the VisitOSLO website, people can find accessibility information of more than 100 hotels, restaurants and attractions in Oslo. For each assessed venue, a large amount of information is registered, such as door width for guests with wheelchairs/baby prams, or alarm systems with vibrating pads for guests with hearing impairments. Clear and trustable information influence the decisions of most disabled traveler when they choose their travel destinations. At the same time, the Internet is the fastest spreading information channel in the world, while accessible products and services have to consider the diversity of customer needs as well as the whole touristic service chain (Oslo for all).

The last but not the least, cooperation in the national and international levels is another successful factor. VisiOSLO is a marketing company with stakeholders from the city's travel trade and commerce which aims to promote the Oslo region as a tourist and congress destination. It not only cooperates with the municipality of Oslo, but also cooperates with other European companies and organizations such as OSSATE (One-Stop-Shop for Accessible Tourism in Europe). Norway cooperates with many other European countries to develop accessible tourism by sharing many similarities like environment, European standards and so on, These cooperations vary from technology to market share which strengthen Norway's international competition and learning experience from others.

In conclusion, the successful factors for Oslo as an accessible tourism destination can be summarized as follow:

1. Detailed legislation and universal design act
2. High quality criteria and requirements by the Norwegian government
3. Education and trained staff
4. ICT is widely used in the tourism industry
5. Cooperation in national and international levels

5.2 Challenges

As the biggest tourism destination in Norway, Oslo meets most individuals' needs in some way. However, considering the specialization and connatural features, there are still some challenges and barriers that are not easy to overcome.

After a deep analysis on the current situation in Oslo, weather and climate become the biggest challenge. Weather and climate are one of the most important factors that affect the decision making of travellers. For instance, a seaside resort is always chosen in some warm destination, while snowing and cold destination is for skiing. As mentioned before, Norway is a winter country which is covered by snow for almost half a year which gain difficulties for outside activities. Inclement weather affects accessibility in many ways, such as slippery sidewalks and unavailable signs. Even many disabled locals "don't get out very much at all" in winter. Tourists with disability may face these difficulties: manual wheelchairs are difficult to push in the snow; power wheelchairs are very hard on the hands with snow and ice on tires and rims. They may even stop running in the cold air; also the handicap parking spots are always taken when there is heavy snow or rain; tourists with heart problems, blood pressure or circulation problems find difficulties to breathe in cold air, some even get asthma in winter. Every year Oslo organizes a walking tour in winter, while it is a big challenge for people with limited mobility. And there are no appropriate devices by far to get over this aspect of life in this regard. This is the biggest barrier for disabled tourists in Norway and how to balance between the environment and accessible tourism is a challenge.

Accessibility and universal design of Oslo have already reached at some level; facilities and services applied in most places cover the main disabilities. Nevertheless, the variety of user requirements within each user group and competing interests and contradictory considerations lead to the fact that requirements of one user group may conflict with those of another. (ISO Management Systems) In other words, providing access to people with certain types of disability often makes it impossible to be used by people with a different type of disability, even becomes uncomfortable for people without disabilities when using the products. For example, in a crowded public transportation like bus, tram and subway, blind people with a

guide dog always make other passages feel inconvenient, and there are some potential risks for people with asthma and allergy. Public transportations have reserved seats for disabled people and pregnant women, however, these seats are always taken by people with walking impairment, pregnant women, women with young children and elderly people. A blind passenger is often asked to give up seats for these people, and then to be found the difficulties to balance on the moving bus and unable to see where to hold on. These conflicts are inevitable, therefore the challenge for related sectors is how to weigh the need for sufficient quality specifications to meet the needs of people with disabilities and avoiding conflicts. (Inger S. Jørgensen 2011)

In addition to weather challenge and conflict of different needs, there are other obstacles that are difficult to pass like financial support, lack of planning and design-capacity, lack of knowledge, research and information and lack of user participation. As the accessible tourism is a travel chain that requires accessibility in every part, a disability awareness component incorporated in the training of planners, architects and construction engineers is needed. Communication and cooperation are better a way for the government and suppliers to face the challenges.

6 Future Outlook

Seeing the potential market of accessible tourism and considering the contributions of universal design to social and economic sustainability, Norwegian government gives an action plan that Norway will be universally designed by 2025. This plan covers most areas of society and intended to help meet Norway's obligations when Norway ratifies the UN Convention on the Rights of People with disabilities. (Norway universally designed by 2025, p 7)

The action plan is based on UN, Council of Europe, EU and Nordic Council of Ministries' recommendations and concerns every component of accessible tourism which includes the adaptation of building and constructions both public and private. For example, the universally designed environment in outdoor areas from facilities to air conditions; the accessible transport system for as many people as possible that comprises information on transport alternatives, the journey to/from, and any stops at stations and bus stops, in addition to the means of transport itself; the widely used ICTs for everyone to have an information society both convenient for local and tourist. Considered measures and related instruments will be used to implement the action plan such as legal instruments, non-legal instruments, economic instruments and cross-sectoral and sectoral measures. Cooperation on national and international levels is also quite important for action plan implement action. (Norway universally designed by 2025, p 9-26)

At the same time, the action plan was released on the Internet and gave an opportunity for organisations, professional institutions and individuals to propose adjustments in connection with the review of the action plan. An open forum will be established to provide information and feedback on the action plan's measures and progress as well. (Norway universally designed by 2025, p 31)

The results of the action plan would benefit the accessible tourism a lot. Disabled tourists will get useful and detailed information from travel planning by using ICTs, adapted facilities and services throughout the whole city according to the needs of disabled people to allow them to spend carefree, relaxing holidays. The plan will help to achieve the goal to become one of the foremost accessible tourist destinations in the world.

7 Summary

After the whole study and research about disabled people worldwide and accessibility in Oslo was completed, the author got some points and facts and realized that the struggle to provide more accessible facilities and services for all segments of the tourism groups is clearly a difficult task.

Statistics show that one of ten persons in the world has some kind of a disability and aging population forms a large proportion. The disability can be temporary or permanent and vary from individual to individual; temporarily injured people usually do not consider themselves as disabled people. With the development of human rights, more attentions have been paid on disabled people for improving their living standard and strengthening the anti-discrimination law. Disability has a strong relationship with elderly people. The growing aging population is the world trend, and therefore, accessibility and universal design are vital.

Universal design and accessibility are essential factors for making life better for disabled people. In order to create a barrier free environment, universal design principles are the guidelines for an action plan and related legislation. Buildings, outdoor areas and transport systems are all needed to be built and adapted in appropriate way that reach the goal of physical access. In addition, ICT as an information access is more and more used nowadays which is seen the equal importance as physical access. Easy and clear reading signage system should be applied in public places for people with limited mobility.

Norway is one of the best countries for caring disabled people and implementing universally designed facilities and services. Disabled people have a high living standard in Norway because of the detailed legislation and laws concerned and widely applied to accessible facili-

ties and services in society. Besides, highly educated and trained staffs have the awareness and knowledge of caring disabled people.

Increasing disabled population brings potential market for the tourism industry. It is known that individuals have different kinds of requirements, some may only use wheelchair, while some may be using wheelchair and glasses together, according to the situation. The special requirements of tourism products and services can be classified into mild, moderate and severe. Accessible for all seems too difficult to reach, however, four categories of disability types are focused when implementing that including wheelchair user/arm impaired people, visual and hearing impaired people, asthma and allergy and people with reading and speaking difficulties. After the case studies, the results show that Oslo is an accessible tourist destination and successful factors were analysed. Still there are challenges and difficulties for Oslo arising not only from own features (winter, snow, ice) but also problems shared with other countries (financial problems, action plan).

For creating a better image of an accessible tourist destination, the Norwegian government and ministries are working together to implement the action plan called “Norway universally designed by 2025”. Facilities and services will be upgraded and adapted gradually. For some reason, there was no chance to do interviews for this thesis. For further research it might be interesting to conduct interviews with political decision makers and related managers about the future development. New perspectives and insights could be gained by comparing the Norwegian attempt to accessibility in tourism with other countries like Sweden and Denmark.

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List of Abbreviations

UNWTO World Tourism Organization

GDP Gross Domestic Product

ICF International Classification of Functioning

WHO World Health Organization

UN Unite Nations

HIS Health Interview Survey

SRFF States råd for likestilling av funksjonshemmete

LDO Likestilling og diskrimineringsombudet

LDN Likestillings- og diskrimineringsnemda

ENAT European Network for Accessible Tourism

OSSATE One-Stop-Shop for Accessible Tourism in Europe

ICT Information Communication Technologies