THE ATTITUDES OF RESPONSIBLE LOCAL AGENCIES TOWARDS DISABILITY

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ABSTRACT

THE ATTITUDES OF RESPONSIBLE LOCAL AGENCIES TOWARDS DISABILITY

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"New paradigm of disability" relates not only to persons but also to the environment they are living in. Therefore recent studies concentrate on the dynamic interplay of the persons and the environment, rather than rather than studying them as separate entities. This approach has revealed that disabled people become handicapped when they face with barriers restricting or impeding their activities in daily life.

Physical, cultural and social barriers have been undertaken by many countries after substantial debate. In the United Kingdom and Japan for instance, disability and accessibility issues have been tackled with reference to disabled people's demands and long-tem struggles against discriminatory implementations in the past. In these countries, whilst disability issue has been discussed, accessibility legislation including numerous measurements for implementation has been enacted and a considerable progress for removing barriers and providing accessibility in the built environment has been experienced through many institutional instruments.

In Turkey, although there are now a lot of legislative measurements for accessibility, little progress is observed in recent years. Barriers in the built environment are still restricting, and even hindering full participation of disabled

people to social life. The problem of inaccessibility is seen related to practice rather than legislation or theoretical frameworks in Turkey. Since they are a part of the bureaucratic system having responsibility on the planning and designing of built environment, local agencies with their administrative and technical staff and organisation gain importance in terms of maintaining accessibility to the disabled. The study aims to provide information about attitudes of local agencies towards disability and accessibility in terms of practitioners rather than users. This study interrogates the knowledge level and outlooks of the related personnel and works of local agencies about disability and accessibility.

Keywords: Disability, Handicap, Accessibility, Local Agencies

ÖZ

SORUMLU YEREL YÖNETİM BİRİMLERİNİN ÖZÜRLÜLERE YÖNELİK TUTUMLARI

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"Yeni özürlülük paradigması" son zamanlarda kişi ve çevre ile ele alınmakta, kişi ve çevre yalnız başına değil, birbirleriyle dinamik bir biçimde etkileşimleri üzerine yoğunlaşmıştır. Bu yaklaşım, özürlünün günlük yaşamdaki etkinlikleri kısıtlayan engellerle karşılaştığında engelli hale geldiğini ortaya koymaktadır.

Fiziksel, kültürel ve sosyal engeller bazı ülkeler tarafından, tartışmalı bir dönemin ardından ele alınmaya başlanmıştır. Örneğin Birleşik Krallık ve Japonya'da özürlülük konusu, özürlülerin talepleri ve uzun süren ayrımcı uygulamalara karşı mücadeleleri ile ilgili olarak ele alınmıştır. Bu ülkelerde, özürlülük tartışılırken, aynı zamanda uygulamaya yönelik çeşitli önlemleri içeren erişilebilirlik mevzuatı yasalaştırılmış ve kurumsal bazı araçlar sayesinde yapılı çevrede engellerin kaldırılması ve erişilebilirliğin sağlanması yönünde kayda değer bir ilerleme hayata geçmiştir.

Türkiye'de mevcut pek çok yasal önlem bulunsa da, yakın geçmişte yetersiz miktarda uygulama gözlenmektedir. Türkiye'deki problem yasal veya teorik olmaktan çok uygulama ile ilgilidir. Bürokratik sistemin bir parçası ve yapılı çevrenin planlanması ve tasarlanmasından sorumlu oldukları için yerel yönetim birimlerinin yönetici ve teknik kadrosu, özürlüler için erişebilirliğin sürdürülmesi

açısından önem kazanmaktadır. Bu çalışmada, konunun kullanıcıdan çok uygulayıcı açısından incelenmesi bakımından yerel yönetim birimlerinin özürlülük ve erişebilirlik hakkındaki tutumlarına yönelik bilgi elde edilmesi amaçlanmaktadır. Bu çalışma ayrıca yerel yönetim birimlerinin özürlüler hakkında ilgili personelinin ve çalışmalarının bilgi düzeyini ve bakış açısını sorgulamaktadır.

Anahtar Kelimeler: Özürlülük, Ulaşılabilirlik, Ulaşılabilirlik Önlemleri

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INTRODUCTION

"The reasonable man (sic) adapts himself so the world, the unreasonable man persists in trying to adapt the world to himself. Therefore, all progress depends on the unreasonable man".

G.B. Shaw (cited in Imrie, 1996, pp: 1)

Imagine! A pupil cannot go the school their choice, a youth cannot find employment in the profession they have trained for, a woman cannot visit her family living on the other side of the city or an old man has to move from his home without an elevator.

The 2002 Disability Survey found there were 8,5 million disabled people living in Turkey, 12.29 % of the total population. Today we still cannot see, meet, know or communicate sufficiently with this part of society. People with orthopaedic, visual, hearing and mental impairments or with chronic illness cannot leave their homes, go to schools, be employed, use urban facilities like public transport, recreational facilities or participate in cultural activities. Ultimately they are unable to participate in social life, equally and with others in the community. While everybody has the right to access to all services, there are many obstacles in the present constructed environment and an important part of disabled people's life relates to their ability to gain access to particular places.

Imrie (1996, pp: 12) found that while the majority of the population are facilitated for in terms of accessing the built environment, a minority has to cope by overcoming their handicaps. His study focused on the findings of the Independent Living Survey conducted in the USA in 1991, where it was found that the top ten 'areas of difficulty' confronting disabled people are mobility, public transportation, bathrooms, steps/street curbs, funding/finance, getting up from a sitting position,

fatigue, frustration/feeling overwhelmed, travelling, having to depend on others (Imrie, 1996, pp: 18).

Eurostat, Statistical Office of the European Communities, conducted a survey in 14 European Union Member States; EU-14 (excluding Sweden) about "disability and social participation in Europe" published in 2001. According to this survey, the rate of disability in the population aged 14-64 in EU-14 countries was 14.5%, of which severely disabled people accounted for 4.5% and people with moderate disabilities the remaining 10.0%. Education level is one of the searched subjects and it is shown that the education level of severe and moderate disabled people was lower than non-disabled ones. Eurostat (2001) gives that people reporting a disability will reach the third level of education in young ages compared with persons not reporting a disability; such a difference at young ages may show the effect of disability as a barrier to educational attainment. When activity status was evaluated for the 25-59 age group, the working group rate was 29% for severely disabled people, 56% for moderately disabled people and 72% for those with no disability, the inactive group rate was found to be 61% for severely disabled people, 35% for moderately disabled people and 22% for those with no disability. In relation to employment, the survey identifies several occupational classes. Amongst persons who are in work, the proportion in white-collar occupations was larger in the population with no disability than in the population reporting a severe or moderate disability. By contrast, the proportion of persons with a disability who have blue-collar occupations was higher than that of persons with no disability (Eurostat, 2001, pp: 51).

Only 29% of persons with a severe disability had an earned income or other private income, 59% received a pension or benefit and 8% had no income. The corresponding figures for persons with no disability were 69, 13 and 15 respectively (Eurostat, 2001, pp: 58). Analysis of the frequency of social interaction with friends and relatives found that disabled people are more isolated than people with no disability. Even though the research does not investigate the causes of low level participation data, environment deprived of accessibility is one of the primary factors restricting the lives of disabled people.

1.1. Problem Definition for Thesis

Prior to formulating problem definition for this study, a conceptualisation of disability is necessary to guide this thesis. Disability is adopted as "the situation

of an impaired person as the result of contemporary social organisation which makes no or little account for that person" (English Union of the Physically Impaired against Segregation's (UPIAS), 1976, pp: 3-4; cited in Oliver, 1990, pp: 11). A socially constructed disability that is recognised without impairment is denied.

Thapar and others (2004, pp: 280) assert that a "new paradigm" for disability has emerged in past decade. Researchers started to study the dynamic interplay of the person and environment, rather than the individual or environment alone.

An additional development in last decade is that disability issues are discussed in relation to the two concepts of human rights and discrimination. Being an equal and full member of the society, satisfying the needs originating from human beings, having control of ones life, deciding and moving independently, briefly owning "the same" life conditions as other are some of the expectations of disabled people from the society they live in and relevant institutions. These expectations are different stresses put on human rights bases and discriminating practices (EC, 2001).

In this respect, the accessibility of goods and services has become the major actor due to its physical and social role in everyday life. The resent physical environment can be easily utilised by the majority of the society as given above, however, the other part does not use the urban places where there exist obstacles that are the result of faulty and one dimensional practice. An important part of disabled people's lives related to their ability to gain access to particular places.

> …when we refer to ableist environments we are talking about spaces in which people with disabling differences are multiply disadvantaged; where lack of access to spaces of everyday life and spatial isolation are compounded and complicated by such facets of social exclusion as poverty, inadequate support services, barriers to inclusion in significant social institutions, and negative reactions to the presence of disabled persons in spaces constructed as 'able-bodied' (Cormode, 1997, pp. 382) .

Accessibility is one of the most important concepts linked to space and can be described as a combination of different definitions as "reaching and using everywhere independently by everybody".

Accessibility is routinely dealt with in the built environment and accordingly it is useful to defining the built environment. It can be given as "*the urban environment consisting of buildings, roads, fixtures, parks, and all other*

improvements that form the physical character of a city, (www.ci.austin.tx.us/zoning/glossary.htm) *as opposed to natural features* (http://encarta.msn.com/dictionary_561502078/ built_environment.html).

The built environment is generally inaccessible to people with a range of physical and/or mental impairments especially for those dependent on wheelchair use. Most disabled people, therefore, are restricted or impeded in daily life, and experience some exclusionary occasions.

Inaccessible environments and their effects can be derived from Gleeson's (1999, pp: 137) grouping;

> • physical barriers to movement for disabled people, including broken surfaces on thoroughfares (streets, guttering, paving) which reduce or annul the effectiveness of mobility aides (e.g. wheelchairs, walking frames),
> • building architecture which excludes the entry of anyone unable to use stairs and hand-opened doors,
> • public and private transport modes which assume that drivers and passengers are non-impaired, and,
> • public information (e.g., signage) presented in forms that assume a common level of visual and aural ability.

In this respect, accessibility can be studied in four different fields, as mentioned above; open spaces, buildings, transport systems and public information.

On the other hand, different types of disability necessitate different design and practices in space. For instance, while stairs and unsuitable ramps are obstacles for a wheelchair user, a pedestrian area where there is no tactile surface or orienting equipment presents an inaccessibility problem for a blind or visually impaired person. A pilot study conducted between November 2000 and August 2001 in Greater Boston and published in 2004 attempted to identify functional access to public buildings and facilities by studying four participants: wheelchair-user, a mobility impaired person who does not use wheelchair, a visual impaired person and a person with no known impairment (as a control group). 30 public buildings were challenged by participants and functional access was determined in terms of the percentage of tasks performed, time, distance, barriers and facilitators. In the conclusion of the study, differences appeared between participants according to task performance and the types and numbers of barriers and facilitators. More barriers were reported by the mobility impaired person and the wheelchair-user, and the highest number of facilitators by the person with

visual impairment and the wheelchair user. On the other hand, the control group reported the lowest number of barriers and facilitators (Thapar and others, 2004; pp: 280-289).

Physical obstacles and barriers are also created and perpetuated by social barriers. In addition to physical mobility difficulties, disabled people could experience a combination of hostile or negative reactions in their living environments. This situation does not encourage disabled people to move around in a public place and intensifies their inaccessibility problems in the long term.

People who have a physical or mental incapability are evaluated differently from other people who form a greater part of the society. The 'disabled', in other words, are produced by a society with economic, political, and social organisation which includes denying the needs of people with disabilities in the creation of the built environment. From this perspective the impairments of the disabled are not the problem; it is society that is the problem.

> These processes do not exist independently from socio-spatial processes, and space (geography) is a key underpinning in the (re)production of particular forms of disablist social relations. In other words, the social construction of disability, attitudes towards it, and the development of disablism, is linked to the creation of the built environment.

In this respect, accessibility has vital importance for people with disabilities. However in Turkey settlements are not comfortable for the mobility of disabled people, a key outcome of the Turkey Disability Survey (State Institute of Statistics, 2004). Although there are several legislative measurements and design standards in Turkey, people with disabilities experience accessibility problems in the built environment and therefore cannot use the urban environment like able-bodied people, owing to unconcerned or insufficient practices. In Turkey, the built environment is planned, designed and created by local agencies and accessibility is one of their duties and responsibilities.

The starting point of this thesis focuses on the circumstances depicted in Turkey. To achieve accessible life environments, the problems standing in the way of progress should be described. Some of these recognised problems relate to local government agencies because they are mostly responsible for built environment. However, it is important to acknowledge that the problem area is rather wide and complex. In this respect, the aim of the study is to provide some amount of information about attitudes of local agencies towards disability and

accessibility. Thereafter it discusses current understanding of disability and accessibility issues in bureaucratic construction of local management. With this aim, various authorities and technical persons are interviewed and causes are discussed in a selected area.

The importance of the study emerges from the intention of putting some information in terms of practitioners (municipalities) rather than users (disabled people).

Before applying this field study, issues as to how accessibility can be recognised is examined in two selected countries, the United Kingdom and Japan where there have been a considerable development in disability issue. The study investigates their legislation, procedural systems, measures and supervision mechanisms from the perspective of practitioners.

1.2. A Short Historical Background

According to United Nations (http://www.un.org/esa/socdev/enable/disun.htm), more than half a billion persons are disabled as a result of mental, physical or sensory impairment and no matter which part of the world they are in; their lives are often limited by physical and social barriers. These numbers tend to increase in time due to wars, accidents, diseases and malnutrition. Approximately 80 per cent of the world's disabled population lives in developing countries.

The general response to disability in the past has been to offer social compensation through charity; separate provision outside the mainstream of society, and the development of specialist caring services. These responses have arguably compounded the problem of exclusion felt by the disabled. The absence of disabled people and disability in the mainstream of society contributes to a self-perpetuating cycle of exclusion (European Commission, 1996).

Barnes and others (1999, pp: 17-20) summurises that in the nineteenth century the first services to be developed were care and welfare, sometimes institutional and educational. These were provided entirely by private organisations. The increase in the number of the war victims caused by the First World War led the belligerent countries to develop different services and schemes, especially related to medical solutions like illness treatment and care. Impaired and disabled persons have been seen as a permanent illness.

The Second World War created more disabled people both in the military and civil society. This time countries sought to fit impaired people into society. The

new tendency is that society and its facilities provided for all of the society should be developed and adapted in regard to people with disabilities. The community-based rehabilitation concept, improvement of physical and social barriers, vocational rehabilitation etc. has been argued and implemented in some societies, particularly developed ones (Barnes et al., 1999, pp: 19-21).

In this part of the study, important international documents are examined because of their effects on the process of acquiring today's rights and the opportunities of people with disabilities all over the world. These documents also effected Turkey's legislation, constitutions and practices in relation to people with disabilities.

1.2.1. United Nations' Background

The movement to a rights-based perspective on disability has evolved and has begun to be broadly endorsed at the international level over the past two decades. Equalisation of opportunities for persons with disabilities has been the subject of much attention within the United Nations (UN), its various Specialised Agencies, and other regional organisation over a long period of time. The first document of significance in the literature is the "Declaration on the Rights of Mentally Retarded Persons (No: 2856)" of UN' resolution dated 1971.

Thereafter, in a major resolution passed in 1975 containing a "Declaration on the Rights of Disabled Persons (No. 3447)" as an addition to the 'Declaration on Human Rights', the united Nations General Assembly stressed that people with disabilities have the same human rights as all other people, which was seen as a turning point for disabled people. This document composed of 13 articles, promoted the integration of the disabled into all areas of the social life, especially creating the opportunity to participate in employment to make them productive. In addition, such documents have set societal responsibilities for this group (UN, 1975).

The designation of 1981 as the International year of Disabled Persons by the General Assembly inaugurated the Decade of Disabled Persons (1983-1992) (Res. 37/52). The most important outcome of the International Year of Disabled Persons was "the World Programme of Action" that was adopted by the General Assembly in 1982. Besides proposing important principles in the areas of prevention and rehabilitation, it emphasised the right of people with disabilities to the same opportunities as other citizens and to an equal share in the

improvements in living conditions resulting from economic and social development.

After the announcement of 1981 as the World Disabled Year, The United Nations formed a ten year program comprising the period between 1983 and 1992 in relation to the declaration. The United Nations was given the central role for the preparation of the World Action Plan, its co-ordination and control. It was mandatory for the action proposals to aim for the prevention of disability, rehabilitation and equal opportunity (UN, 1982).

In this period two General Assembly Decisions were the “Tallinn Guidelines for Action on Human Resources Development in the Field of Disability (Res. 44/70)” dated 1989 and “Principles for the protection of Persons with Mental Illness and the Improvement of Mental Health Care (Res. 46/119)” dated 1991.

New approaches towards disabled people became more apparent in 1993 with the adoption of the ‘Standard Rules for the Equalisation of Opportunities for Persons with Disabilities’ by the United Nations (1993 (a)) General Assembly (Res. 48/96). These rules were reaffirmed in conferences held by the United Nations. Moreover, international conferences organized by the United Nations since the end of the decade have addressed the situation of disabled persons as a substantive concern in the context of human rights, development and demographic change, social policies and development, women and shelter.

The Vienna Declaration and Program of Action, adopted by the World Conference on Human Rights (Vienna, 14-25 June 1993) stressed the universality of human rights including persons with disabilities as people are born free and equal, and have the same rights to life and welfare, education and work, independent living and access to active participation in all aspects of society (United Nations, 1993 (b), A/CONF. 157/23).

The disability issue was also discussed in the International Conference on Population and Development held in Cairo during September 1994. There the need for continued action to promote effective measures for the prevention of disability, for rehabilitation and for the realization of the goals of full participation and equality for persons with disabilities was stressed. The objectives aimed to ensure the realization of the rights of all persons with disabilities, and their participation in all aspects of social, economic and cultural life, to create, improve and develop necessary conditions that will ensure equal opportunities for persons with disabilities and the valuing of their capabilities in the process of economic and

social development, and to ensure the dignity and promote the self reliance of persons with disabilities. In order to reach such aims actions were proposed to be taken by governments including the consideration of the needs of persons with disabilities in terms of ethical and human rights dimensions, the development of infrastructure to address the needs of persons with disabilities, in particular with regard to their education, training and rehabilitation and the implementation and promotion of a system to follow- up with social and economic and social integration (www.un.org/popin/icpd/2.htm).

The Copenhagen Declaration on Social Development and Program of Action of the World Summit for Social Development (Copenhagen, 6-12 March 1995 (a), A/CONF. 166/9) notes that people with disabilities are often forced into poverty, unemployment and social isolation. The Summit's Program of Action addresses disability issue in three main chapters on the eradication of poverty, the expansion of productive employment and reduction of unemployment, and social integration (UN, 1997).

The last and the most important stage that is being advanced by the UN is the adoption of a convention that is based on the relation of human rights and people with disabilities. The importance of this stage lies in the fact that the "Convention on the Rights of Persons with Disabilities" has a binding character for the States that will ratify it. The Convention is opened for signature on 30 March 2007 and came into force on 12 May 2008 (UN, 2008). Although the rights of persons with disabilities were covered by previous conventions of the UN, the invisibility of disabled people as subjects of human rights and equality law is an inevitable consequence of their separation from the mainstream. Through this disability-specific Convention, it will become more apparent that people with disabilities are holders of human rights instead of recipients of welfare and charity (Lawson, 2007, pp: 584). The purpose is defined as "to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities" (UN, 2008). In line with the purpose, the concept of equality gains fundamental importance to provide full enjoyment of human rights by disabled people. As there is a strong overlap in the aims of The Convention and the European Union Disability strategy that will be elaborated in the next section, the European Commission has signed the Convention on behalf of the European Community (CEU, 2007) but has not ratified it yet.

1.2.2. Council of Europe's and European Union's Background

After 1981 was announced by the UN as the International Year of Disabled Persons and "the World Programme of Action" was declared, the European Community started to work on people with disabilities. Its first action was a Recommendation on "Social Integration of Disabled People" at the level of the European Community in 1981. Five years later, in 1986, a further recommendation was passed entitled the "Employment of Disabled People in the Community (R.No:86/379/EEC)". This recommendation gives some measures of equal opportunity to Member States in the field of employment and in the monitoring of the provision of barrier-free occupations.

Prior to this period, the Council of Europe's first recommendation concerned the "Situation of the Mentally Ills (R.No:818)" passed in 1977. Another important recommendation was "Towards full Social Inclusion of People with Disabilities (R.No.1592) dated 2003. Two programmes named HELIOS (1988-1992) and HELIOS II (1993-1996) were formed in order to share knowledge about economic and social integration, equality of opportunities and independent living.

The 'European Social Charter' (1989), one of the most important documents, agreed by the member states of the European Community, proposed measures to encourage the protection of the disabled, job placement, occupational and social adaptation and taking measures for work places and improving transportation facilities (Article 15/2).

A recommendation of the Council of Europe in 1992 provided a more general framework called "A Coherent Policy for People with Disabilities (R.No:92)".

In 1996, the European Commission published a communication on "Equality of Opportunity for the Disabled (com (96) 406), the aim of which was encourage a new impetus to the way European society deals with issues involved. Instead of following the traditional welfare approach of merely accommodating people with disabilities, the emphasis has been placed on removing barriers to their active participation in the labour market and in life generally; in education, in many transport systems and public buildings and housing. An accessibility measure and Council Recommendation is for a "Parking Card for people with Disabilities" accepted in 1998, framed in terms of a standardised Community model (EC, 98/376).

Is can be derived from these documents that efforts to combat discrimination and to achieve the full participation of disabled people in social and economic life are basic principles of European Community. The Amsterdam Treaty of 1999 stresses in article 13; “Without prejudice to the other provisions of this Treaty and within the limits of the powers conferred by it upon the Community, the Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, may take appropriate action to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation.”

With this provision, actions concerning disabled people gain a more important base. The European Commission prepared a Council Decision and an Action Program for the period of 2001-2006 based on the Amsterdam Agreement about discrimination and the ways of combating discrimination. The Decision gives that instead of providing special services, barriers faced by disabled people while they use their rights must be removed. A general framework document, “Equal Treatment in Employment and Occupation (2000/78/EC)” is the only document having sanction dated 2000 that is based on the 13th article of the Amsterdam Treaty. Member States were obliged to adapt their National Legislation to the Directive by the end of 2003.

The European Commission published “Towards a Barrier-free Europe for People with Disabilities (COM (2000))” in 2000. According to this communication, social, architectural and design barriers restricting disabled people from accessing social and economic facilities must be removed by a comprehensive strategy.

The Council of Europe declared a Charter of Fundamental Rights of European Union in 2000, which includes a part about discrimination and its prevention, and the independency of people with disabilities and their participation in social life.

The European Community declared a European year for people with disabilities with the Council Decision “2003 as European Year of People with Disabilities (2001/903/EC)” in 2001. Some goals and the aims of the European Year of People with Disabilities are; to raise awareness of the right of people with disabilities to protection against discrimination and to full and equal enjoyment of their rights as laid down, to encourage reflection on and discussion of the measures required to promote equal opportunities for people with disabilities in Europe; to highlight the positive contribution that people with disabilities make to

society as a whole. A European Action Plan was passed by the Commission as “Equal Opportunities for People with Disabilities (COM (2003) 650)”. The main objectives of the Plan are implementation fully the Directive on equal treatment in employment and occupation, reinforcement of the mainstreaming of disability issues in the relevant Community policies and improvement of accessibility for all.

There is a need to mention the main theme of Second European Conference of Ministers responsible for integration of policies for people with disabilities held in Spain in 2003. In this organisation, states were invited to promote shift from;

functional limitations to functional capacities,

assessing disabilities to assessing abilities,

the institution-based care setting to the life in the community,

the medical model of service delivery to individual support,

care services to support services,

the service-driven approach to the user-driven approach,

specialised measures to integrated measures

the rehabilitation to do empowerment of the individual

the compensation for individual impairments to the elimination of environmental obstacles

passive measures to replace income to active measures intended to foster participation

in short: the paradigm shift from the patient to the citizen (www.coe.int/t/e/social-cohesion/soc-sp).

In 2004, the Commission published a Green Paper as “Equality and non-discrimination in an enlarged European Union (COM (2004))” including current situation and how tackling discrimination is possible. One year later, the Commission designated “A Framework Strategy for non-Discrimination and Equal Opportunities for All (CON (2005) 224)”. In this respect, 2007 was declared as “European Year of Equal Opportunities for All” by European Commission.

1.3. Theory of Bureaucracy

Weber investigates appearance of bureaucracy in the modern society after more traditional organisational form in detail. This modern bureaucratic organisation is defined by Weber (1960, pp. 18-20) with a group of fundamental categories of legal authority,

(1) A continuous organization of official functions bound by rules.
(2) A specified sphere of competence. This involves (a) a sphere of obligations to perform functions which has been marked off as part of a systemic division of labour. (b) The provision of the incumbent with the necessary authority to carry out theses functions (c) That the necessary means of compulsion are clearly defined and their use is subject to definite conditions…
(3) The organisation of offices follows the principle of hierarchy; that is, each lower office is under the control and supervision of a higher one…
(4) The rules which regulate the conduct of an office may be technical rules or norms…
(5) … the members of the administrative staff should be completely separated from ownership of the means of production or administration.
(6) …there is also a complete absence of appropriation of his official position by the incumbent…
(7) …The combination of written documents and a continuous organisation of official functions constitutes the "office" which is the central focus of all types of modern corporate action.

The Weber's theory is given as a system of power where leaders exercise control over others and based on discipline (Scott, pp: 41-42).

This formulation is criticised by many authors, such as by Gouldner (1960, pp: 48). He suggests that Weber's this theory neglects the different bureaucratic structures forms and historically developed social structure. Because this type of constructions have been shaped in time socially, this discussion is seen necessary for the discussion of Weber's bureaucratic theory.

According to Scott, bureaucracy is only '*the existence of a specialized administrative staff*'. Weber (1960, pp: 21) gives the characteristics of this administrative staff that are free but impersonal official obligations are important and are designated by hierarchy of the office. The office is also described by Weber that there is a defined sphere for each one and free contractual relationship system.

In the bureaucratic theory, 'organisation' appears also a construction which should be examined. Simon (1960, pp: 52-53) presents the matter by discussion 'decision' making mechanism. An organisation defines what decisions a person makes, and how a person is being subject in making each of these decisions. While allocation to 'functions' plays a significant role in the process, formal structure of 'authority' also designates the decisions

1.4. Limitations for the Thesis

In preparation of this thesis, it was necessary to identify some limitations that closely affect the study. One of these concerns the scope of the study. This

thesis is primarily concerned with issues concerning the accessibility of people with disabilities in the built environment. Social aspects of accessibility such as the level of social consciousness and awareness are considered in some degree.

Certainly, there are various countries that made significant progress in accessibility politics and practices all around the world. However, two of them are selected and their experiences about disability, institutional and legislative situation relevant disabled people and accessibility are investigated, which is one of the limitations for the thesis. However this limitation is acceptable in that it is intended to discover some criticism of the approaches of these countries' systems and practices. However, it is recognised that those available critics may be one dimensional and insufficient, which is one more limitation for the thesis.

On the other hand, in the case study conducted in Ankara-Turkey, authorities and personnel interviewed and questionnaire applied are assumed as they have some thoughts and knowledge about disability and accessibility of people with disabilities independent from their social and cultural norms and backgrounds.

1.5. Method of the Thesis

Approaches to addressing the issue of disability in the society have always been important as they influence attitudes towards disabled people, social policies and practices. Different approaches have gained dominance in different times. This thesis is prepared based on the social model of disability, in which the existence of impairment is not rejected but the problem is sought not within the individual but within the society.

The study is advanced according to the following steps;

1. to determine the problems of disabled people in the built environment,
2. to study the concepts and theories of accessibility, ableist environments, barrier-free built environments, mobility and enabling environments,
3. to examine a good example of accessibility by exploring two different country's accessibility politics and practices,
4. to compare selected countries' provisions of and strategies to develop accessibility,
5. to identify knowledge level of planners and designers working in selected local agencies about disability and accessibility,

6. to advance a set of propositions for achieving accessibility in the built environment in the light of the findings of the field study in relation to current conditions in Turkey.

The study is composed of three main parts. The first addresses theoretical concepts that should be discussed in order to provide what is essential for scrutiny of case studies. After disability and other related terms like impairment, handicapped and types of disability are given, disability approaches which indicate how the study takes up the disability problem are asserted. Thereafter the study starts to examine the socio-spatial aspects of disability. The needs of people with disabilities in space and accessibility issues, which form one of the main components of the study, are discussed in relation to mobility and movement terms, barriers, suitable arrangements, and enabling environment and urban design issues.

After the described context is given, the second part of the study concerns the case studies. The first step of these case studies looks at practices in two countries that were chosen according to their good accessibility practices and politics. The United Kingdom as a European country and Japan are thought as two different culturally and politically experienced countries where disability and accessibility politics are rather distinct and developed. Prior to investigating the degree to which they have succeeded to integrate disabled people to social life, their disability and accessibility background is revealed. The study then examines surveys, data and publications about participation of people with disabilities in these countries.

The second phase in the case studies concerns a critical study of the demographic, legislative and practical background in Turkey. Following this, a research study identifies the Turkish agencies responsible for the built environment, municipalities' attitudes towards disability and accessibility matters. The aim is to investigate why in spite of legislative measurements, accessibility and sufficient barrier-free practices and necessary improvements are not implemented. With the questions having this viewpoint, the field study tryes and discloses personal and professional standpoints and institutional perspectives.

Research was conducted in local authorities in Ankara. The Greater Municipality of Ankara and five central county municipalities, Çankaya, Keçiören, Altındağ, Yenimahalle and Mamak were selected for the case study. Five different departments in the Municipalities were identified to be concerned with the built

environment; Department of Infrastructure, Department of Urban Planning, Department of Parks and Landscape, Department of Environmental Protection and Control, and Department of Studies and Projects. Authorised decision makers, planners, architects and landscape architects from these departments were interviewed and the questionnaire was applied in order to take more detailed information.

During interview, it was intended to obtain information from municipality personnel about their attitudes to people with disabilities and their relationship with the built environment. Accordingly, the case study was devised as follows:

Each municipality was asked whether there existed a body related to people with disabilities or not. If there was a particular body working on disabled people, authorities and personnel therein were interviewed in addition to technical departments. At the first step of the case study, a questionnaire was applied to authorities and personnel, who work in technical departments. The first part of the questionnaire aimed to find out to what extent they were familiar with disability issues, therefore questions were asked about general disability concepts, the needs of disabled people in built environment and accessibility.

In second part of the questionnaire, authorities and personnel were asked questions related to legislation and standards concerning barrier-free built environment. Their knowledge of current legislative measures in Turkey were then compared.

In the third step, municipalities were asked whether they possess demographic and statistical data for people with disabilities living in their authority area, or not. If they did, it was established if that data was mapped or not.

In the fourth step, the extent to which accessibility measures are taken into consideration in works carried out or significant works for people with disabilities are established. If the work had been completed, the measures for accessibility may remain as advice or be projected and planned for the future, or they have been implemented. In development plans, implementation plans, landscape projects and improvement or modification plans, the study aimed to establish to what extent accessibility norms and needs of people with disabilities are applied. If projects and plans were not implemented, the causes for this were investigated. If implementation had been affected, it was asked whether legislation and standards about accessibility were incorporated in the plan and project practice or improvement and reconstruction processes. If local authorities did not

undertake any work or significant activity for people with disabilities, the reasons given for this were identified.

This case study process is summarised in Figure1: Application Chart of the Case Study.

The third and final part of the thesis addresses findings, assessment and conclusions. Some suggestions are also developed in this part. The research considering two developed countries and its findings are compared to the Turkish case study and field application findings.

It is intended that the study is to provide complementary information for future studies about accessibility and responsible local agencies, and to identify key indicators for barrier-free built environments that comprise one of the most important components of an equal and integrated society.

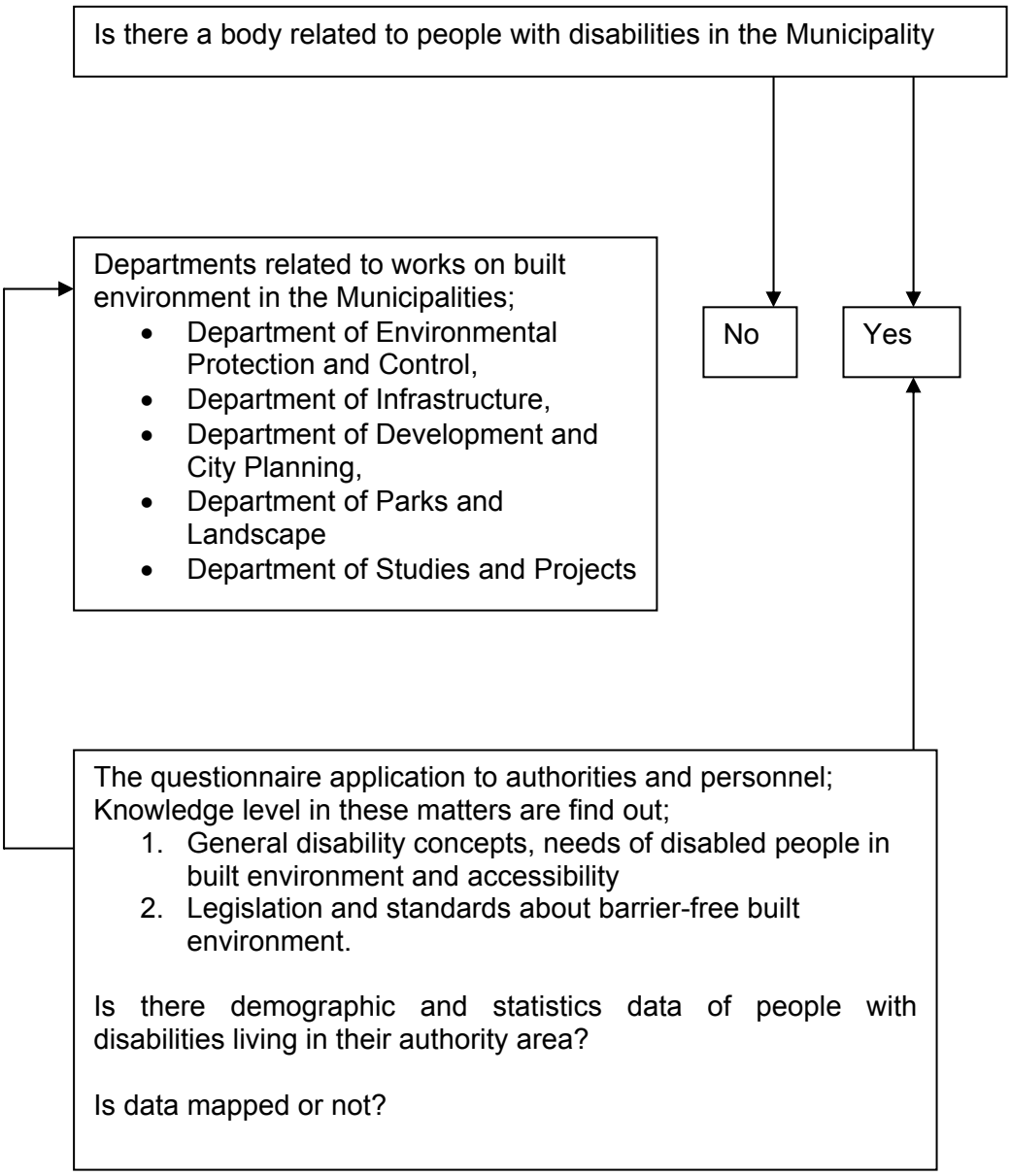

Figure 1: Application chart of the case study (First Part; Part I, II, III of the Questionnaire)

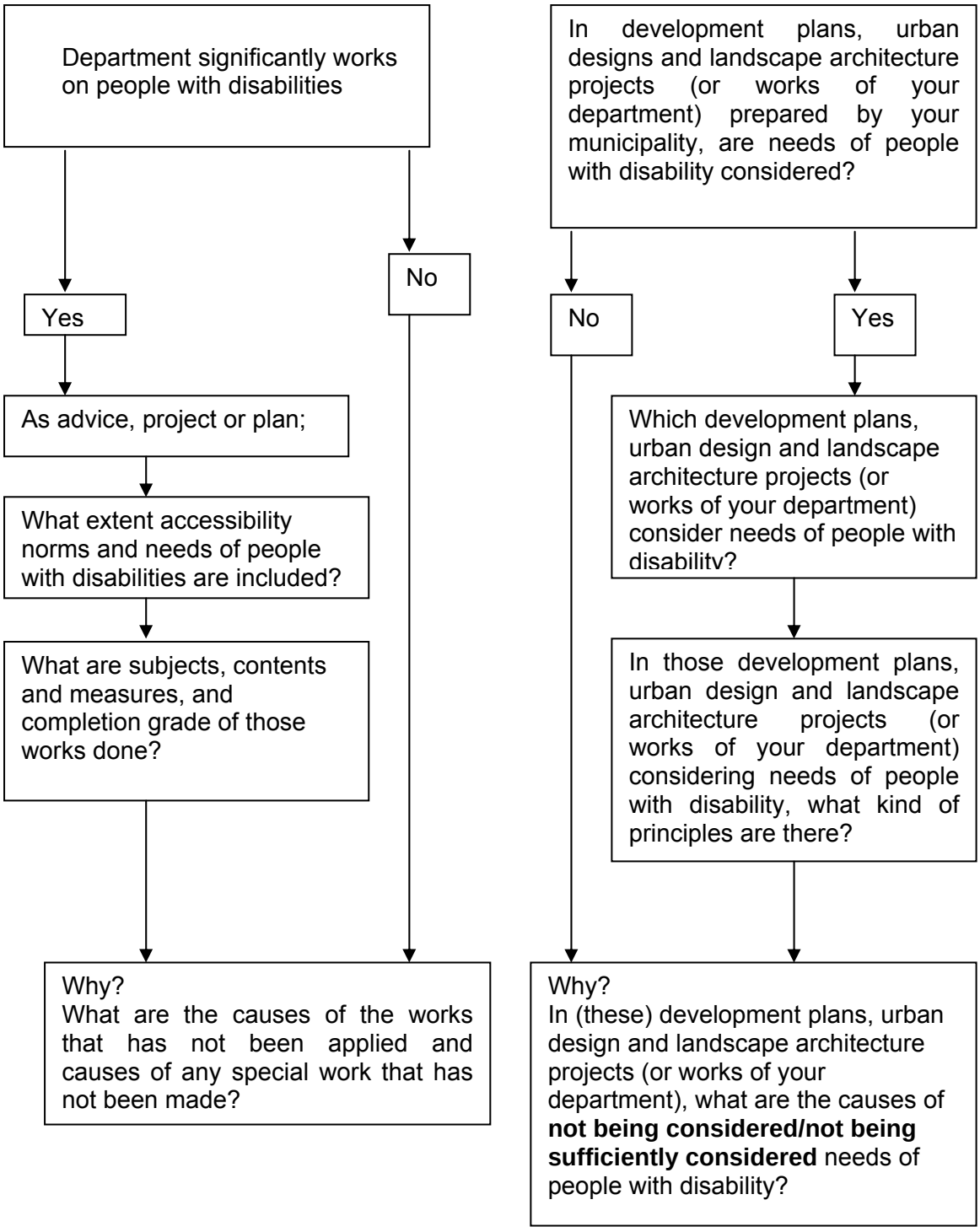

Figure 1: Continued (Second Part; Part IV of the Questionnaire)

CHAPTER 2

DISABILITY AND ACCESSIBILITY

"Disabled people can only be integrated in space if society recognises that space impedes and then goes some way to providing remedies".

L.G. O'Brien and M. McFetridge, 1991, pp: 153
(cited in Matthews and Vujakovic, 1995, pp: 1082)

The integration of people with disabilities into society can only become a reality rather than a dream via removing barriers along their way. The quotation given above indicates that barriers related to space stand in front of and impede disabled people's adequate participation in social life in the same way that other members of society do. However, there is a variety of other social and cultural obstacles originating from and/or affected by spatial organisation and use. Owing to this and the fact that disability is a situation experienced socio-spatially, these barriers should be investigated in a socio-spatial manner. This chapter aims to take up disability and spatial concerns in their entirety and constitute the theoretical basis in which all the fundamental concepts are discussed simultaneously.

While the main concepts are disability and accessibility, other concepts revolving around them are also examined and interpreted in this part of the study which guides the reader to the coming chapters.

2.1. Disability

2.1.1. Disability Concept in Different Approaches/Models

Every historical past and evidence differs from another when disability is under consideration. Social and economic politics, attitudes, institutional constructs, family and vicinity relations, even people with disabilities' relations with

each other designate the social situation of people with disabilities, their identification, title and finally definition in a given society. As mentioned previously, though all of the approaches can be seen in different societies, three main tendencies have appeared as the most important approaches which constitute and affect the social and political approaches of societies towards disability in the literature: the religious or charity model, the medical model and the social/right based model. Indeed, disabled people have undergone difficulties in their past experiences. It would not be wrong to say that most occasions take a negative turn for people with disabilities; examples of oppression, marginalisation and exclusion abound in disability history.

The charity model originates from the religious conceptualisation of disability and, as given by Davies (1999, pp: 75-76) includes pity, embarrassment, do-gooding, dependency, sympathy and rattling collection tins. Some of these attitudes are seen in the history of the UK during periods of institutionalisation and the segregation through religion approach to the issue. It is seen that under the effects of this approach, categorisation of physiological functions was perpetuated and norms of abnormality, the deviant and the worthless were equated with disability (Imrie, 1996, pp: 27).

The charity model of disability is not elaborated in this study in detail. However, the remains of this approach still affect social, cultural and spatial organisation of societies for disabled people, which should not be forgotten.

There are two mediate models: the rehabilitation-educational approach and the psychosocial rehabilitation approach. The former is about supports for an independent and normalised life and then integration into the community. The latter is about developing mastery and competence, and learning new behaviours or adapting existing ones in order to meet needs (Ferguson, 1997, pp: 252).

2.1.1.1. Disability in the Medical Model

The medical model perceives disability as an individual concern and focuses on the self of the person and differences from the ‘normal’. Gleeson summarizes Abberley’s discussion of the concept by saying the medical model “locates the source of disability in the individual’s supposed deficiency and her or his personal incapacities when compared to ‘normal’ people” (Abberley, 1997, pp: 1; cited in Gleeson, 1999, pp: 18). Until the beginning of the 20th century, this approach dominated social organisational construct. Diagnosis of the cause of

disability and treatment of this cause with medical solutions in order to normalise as much as possible has gained importance.

Gleeson (1995; cited in Imrie, 1996, pp: 28) put forth in consideration the positivistic behavioural aspect of the medical model with regard to theorization of disability such as an adaptable physiological condition. Medical care, cure, rehabilitation and treatment are the most popular activity fields and consequently health and care policy should be modified or reformed. Whilst human beings are accepted to be flexible and 'alterable', society is seen to be fixed and unalterable, and social welfare policies are designed to support disabled people in terms of dealing with their disability (Barnes et al., 1999, pp: 21). Access policies, on the other hand, declare that built environment addresses are utilisable for most people, so people with disabilities should change their environmental behaviour according to constraints they face.

Imrie's (2000 (a), pp: 1643) conceptualisation representing the relationship between mobility and impairment through particular discourses claims that *'immobility problem is personal and specific to the impairment'* and there is a strong need to restore the mobility. The medical model supposes disability as an illness and because care is the priority issue, institutions like hospitals as *'containers'* remove people with disability from the society (Ferguson, 1997, pp: 252). Lifchez (1987, pp: 1-2), on the other hand, mentions how the society demands the removal of 'misfits' from the mainstream through buildings like asylums, prisons and hospitals constructed according to the managers' principles.

2.1.1.2. Disability in Social Model

After the hegemony of the medical model on disabled people who need help, care, and attention as dependent persons and victims of a personal tragedy (Barnes et al., 1999, pp: 21), the social model comes onto the scene with its discussions and great struggles emerging from the past disability experiences. The 1970s and 80s were the time of protests and activities carried on by disabled activists and organisations, similar to other minority groups. These pivoted primarily on the criticism of the medicalisation of the disability. As particular rights sourced from being a human were requested from governments and societies in this period, this model is also called the right based model.

The past disability experiences mentioned above are listed by Barnes and Mercer (1997; cited in Gilson and Depoy, 2000, pp: 208) as negative attitudes,

limited physical access, limited access to communication and/or resources, and to the rights and privileges of a social group. In the coherence of this model, all these are the problems which restrict or impede integration of people with disabilities to social life adequately; the impairment is not the problem. Long standing inequality practices and exclusionary politics constitute the nature of the problem. Disability is not a characteristic and part of an individual; it is a reflection of complex social environment.

People with disabilities achieve important rights emerging from basic human rights in different countries as a result of Independent Living Movement and related activities. In a similar vein, disabling social aspects and built environment are two main right fields. The USA, UK, Canada and Australia are the countries that declared the rights of people with disabilities by Acts and have made many statutory provisions in order to create more accessible built environments (Park et al., 1998, pp: 211).

Blackman (et al., 2003, pp: 357) argues that the social or right based model of disability de-medicalises disability and politicises it as an issue of universal rights. He also gives the principle of the social model that disability is an outcome of the exclusionary practices in society with all its body and fields. A shift in a society can only happen when that society's discriminatory and insufficient access implementations to power which put disabled people at a disadvantage or turn them into an oppressed minority group with an unequal and inferior social position (Davies, 1999, pp: 76) is noticed and changed. The design of the built environment, therefore, is mostly disabling and it is necessary to pay great attention through spatial concerns.

Butler and Bowlby (1997, pp: 412-413) explain the social model of disability by discussing two features of the model. The society, first of all, with its economic, political and social marginalising organisation makes physically and mentally unable people 'disabled'. The built environment is constituted in the way of ignoring their interest, additionally. Moreover, the statement of Crow (1996, pp: 206; cited in Butler and Bowlby, 1997, pp: 413) shows the difference of transition to the social model:

> …I was being dis-abled –my capabilities and opportunities were being restricted– by prejudice, discrimination, inaccessible environments and inadequate support. Even more important, if all the problems had been created by society, them surely society could uncreate them…

While a person with disability might say according to the medical model ‘I cannot go into the museum or the cinema because my disability prevents me from climbing the stairs’, the same person can say ‘I cannot go to the museum or the cinema, because the steps prevent me entering the building’ in the approach of the social model (Davies, 1999, pp: 76). From this viewpoint, all people should be able to gain access to buildings, with no difficulty and no assistance, as ‘normally’ as other people.

When a person with impairment cannot enter a building, a kind of social exclusion and stigmatisation can begin in terms of revealing his/her inability. Parr (1997, pp: 439) also wants to attract attention to service provision and participation to decision-making process and mentions ‘ableist geographies’ including difficulties of accessing the spatial and political public realm, and material and immaterial barriers produced by the supposedly ‘able bodied’ and ‘able minded’.

> The social model is based on the principle that disability is a denial of the civil rights caused by exclusionary practices in all spheres of society from employment to design. This principle separates ‘impairment’ caused by disease or injury from ‘disability’ caused by personal, social and environmental barriers that, if removed, could enable capacities to be re-gained. Indeed, impairment itself is questioned as a meaningful concept when there is so much variation in physical and cognitive characteristics across human population (Blackman, et al. 2003, pp: 357).

Blackman (et al., 2003, pp: 367) also emphasises that the focus should shift from the disoriented, confused and distressed, and private sphere of the person to the disorienting, confusing and distressing environments, and public sphere of planning and design in this model. Freund (2001, pp: 702) adds that the social model pays attention to *bodies*, *space* and active, moving *bodies in space*. Therefore, even though disability is *created* in the case of the emergence of two conditions – a person with a pathology or an injury and environment unsupportive of an action – environmental intervention instead of medical or surgical interventions for people with disabilities to improve performance (Stark, 2001, pp: 37) appears as one of the most vital emphases of the social model.

As a consequence, an accessible or barrier-free built environment purified from obstacles was one of the main struggle areas of equality in the past on account of segregationist approaches as the physical forms of the urban landscape (Hahn, 1986, pp: 276). Golledge and Stimson (1997, pp: 496) give the American process of transformation on approach towards disability issues which is

an example of transition from *macro* environment to *micro* environment, that is to say from the medical to the social model. American Standards Act of 1961 forced medical aid, welfare support, derived environments, special education, assistive housing and transportation, and assistive technological equipment, which is evaluated by Golledge and Stimson as an emphasis on individual disabled people. After a period of long and hard barrier-free movement manifestations, the course has been changed to physical design of *macro* environment which means accessible physical environmental design to help people with disabilities to function independently in everyday life.

2.1.2. Definitions and Terms Related to Disability

2.1.2.1. Definitions of Impairment and Disability

Some disabled people may say 'It does not matter whether you call me crippled, blind, disabled or handicapped. I only expect to receive appropriate and necessary services from the society and the state in accordance with my needs. This is what matters.' This statement belongs to a young person with visual impairment. Consequently, the terms are not as important as real life; however, it is thought in this study that in order to meet the needs of disabled people adequately, it is important to know and understand who a person with disability really is.

Therefore, before beginning other discussions, like other academic studies, the concept of disability should be elaborated in terms of what it means. For this study, the focal point is to draw the frame of the term and the concept of disability and to clarify the critical difference between two concepts: disability and handicap.

Although there is a useful summary of Gleeson (1998, pp: 89) which may refer to a considerable range of human differences like age, health, physical and mental abilities, there is a number of disability definitions in academic studies and references according to their conceptualisation of the issues, and there are many critics of these definitions too. Correspondingly, Dear and others (1997, pp: 456) also state that there is no such thing as non-stigmatising terminology and that even the term *'people with [disability X]'* only distracts individual's perceived deficits. On the other hand, Oliver (1990, pp: 3) criticises that terms like cripple, spastic, mongoloid etc. are offensive and those like the handicapped, the blind, the deaf etc. are depersonalising. After considering these discussions, the terms

‘disabled people’ and ‘people with disability(ies) were approved in the context of this study.

Although it is important and difficult to define disability due to its relation to a variety of concepts and issues, the hierarchy of the three concepts is useful to start. Impairment, disability and then handicap were described by the World Health Organisation (WHO) under the title of International Classification of Impairment, Disability and Handicaps (ICIDH) aiming at providing uniformity in different countries in 1980. These are mentioned as standard official definitions in many studies:

> 1. Impairment: Any loss or abnormality of psychological, physiological or anatomical structure or function.
>
> 2. Disability: Any restriction or lack of ability resulting from an impairment to perform an activity in the manner or within the range considered normal for a human being.
>
> 3. Handicap: A disadvantage for a given individual, resulting from impairment or a disability that limits or prevents the fulfilment of a role that is normal depending on age, sex, social and cultural factors for that individual (WHO, 1980, pp: 29).
>
> A forth concept, disadvantage is also defined by WHO as;
>
> 4. Disadvantaged: A state of being in which it is difficult to perform the accepted and expected activities typically undertaken in a society because of discrimination, differentiation, lack of equal opportunity, or simply because the social system does not facilitate the constrained behaviours of disadvantaged groups (WHO, 1980, pp: 29).

These definitions are criticised by Abberley (1997, pp: 1; cited in Gleeson, 1999, pp: 19) for their origin and emphasis on ‘impairment’. In order to perpetuate this discussion, Gleeson’s explanation is appropriate as ‘impairment is a form of first nature that certainly imparts a given set of abilities and inabilities’.

According to a disabled author, Golledge (1997, pp: 392), there are two main approaches to the definition of disability, which is actually a summary of the medical and social models of disability. The first approach includes physical limitation and makes the person come to the fore. The second one is composed of limitation of the power to perform social roles and the attitudes towards disability in society, in which there is an assumption of social and political discrimination.

Dear and others (1997, pp: 456-457) consider this approach in more detail. Firstly, they consider the term by describing people with substance abuse, physical impairment as a result of loss of a limb, arthritis, HIV/AIDS or sensory

problems, psychological conditions including mental retardation and mental illness. Secondly, the social dimension of the term is defined by showing that social relations designate the difference between others and people with disabilities who have certain individual characteristics. Freund (2001, pp: 692) adds that the first approach is a dichotomous category which includes governmental, bio medical or activist criteria. The second is, on the other hand, a socio-cultural construction and implies that 'one is disabled in different spheres of life and to different degrees'.

While WHO's definitions draw a picture of conditions which stem from an impairment reality, bilateral approaches suggested by Golledge, Dear and Freund give an opportunity for an alternative way of thinking. Their early statements accept the reality of impairment; however, it can be derived that later descriptions emphasize the environment and its restrictive role in the concept of handicap. To put it in a different way, the later ones are tantamount to the social approach of disability.

Like Gleeson's *difference* emphasis given at the beginning of this part, Dorn's conceptualisation of disability is 'a dissident body, meaning a corporeality that is particularly resistant to articulated norms' (Dorn, 1994, pp: 154; cited in Gleeson, 1999, pp: 54) and 'the sorts of norms he has in mind here included socially constructed ideals of beauty and physical aptitude' (Gleeson, 1999, pp: 54) should also be thought over carefully.

After investigating and explaining all of the definitions in detail, definitions appropriated in the context of this thesis can be declared. In the thesis, the situation of impairment is not denied and the situation of the disabled, which is the fundamental concept rather than impairment for the thesis, is elaborated for all of its causes. While WHO's disability definition remains insufficient because of giving only restrictions and inability which stem from impairment being isolated from social and environmental conditions, the social conceptualisation of disability is assessed with barriers which cause the handicap. In the thesis, handicapped is a situation emerging as the conclusion of a process.

The most reasonable definition in this manner can be created by partially quoting from the definition in the English Union of the Physically Impaired against Segregation's (UPIAS) (1976, pp: 3-4; cited in Oliver, 1990, pp: 11). In spite of being theorised only for physical impairment, it can be adapted to all kinds of impairment. Hence, according to the UPIAS:

> Disability, the disadvantage or restriction of activity caused by a contemporary social organisation which makes no or little account of people who have physical [and other kinds of] impairment …

2.1.2.2. Distinction between Being Disabled and Handicap

After clarifying what disability is and its meaning for an individual, how a person becomes handicapped should be constructed within the frame of the thesis. Even though disability is accepted with its social approach manners, the definition of handicap indicates some new issues, especially implicit or apparent barriers. The concepts disability and handicap are used interchangeably in Turkey in daily life. However, in order to discuss the barriers effectively, being handicapped should be elaborated.

In the World Program of Action of United Nations, a handicap is described as follows:

> Handicap occurs when they [disabled persons] encounter cultural, physical or social barriers which prevent their access to the various systems of society that are available to other citizens (United Nations, 1982).

This definition emphasizes the loss of opportunity or restriction in a society which is responsible for providing all people with the same rights to utilise a range of opportunities. Lifchez (1987, pp: 2) gives an assertive summary when he writes ‘able-bodied population handicaps the disabled’.

The physical barriers mentioned in the definition will be discussed in further detail later in this work but the cultural and social barriers can be exemplified in consideration of space. Social barriers are formed by negative social attitudes, such as perceiving the disabled to be dependent or in need of help, and approaching them with pity or even hostility. Whether or not the built environment provides appropriate mobility conditions, when a disabled person faces such negative attitudes, he/she may be reluctant to go out. The cultural barriers may also affect accessibility of a person with disability more directly. In the past, visually impaired people in Turkey wanted to use trained guide dogs. However, speed traffic flow and drivers’ negative behaviours including disobeying the rules, such as not to stop at the red light on a pedestrian crossing, render the use of a guide dog impossible as they are trained to pass when the green light turns on. Besides, cars parking on sidewalks can be given as another cultural

barrier affecting mobility. It should be emphasised here that there is a number of complex social and cultural barriers created in/by the society.

Ferguson (1997, pp: 252) also gives the distinction between the terms by referring to 'disability' as the loss or reduction of functional ability and 'handicap' as the disadvantage or restriction of activity caused by disability. He summarises the differences by quoting from a person with disability:

> 'My body makes me disabled, but the environment makes me handicapped'.

Keates and Clarkson (2003, pp: 71) find WHO's definitions too negative and they assert that people's 'capabilities' should be emphasised instead of their 'disabilities'. The process of impairment, disability and handicap is given in the following diagram:

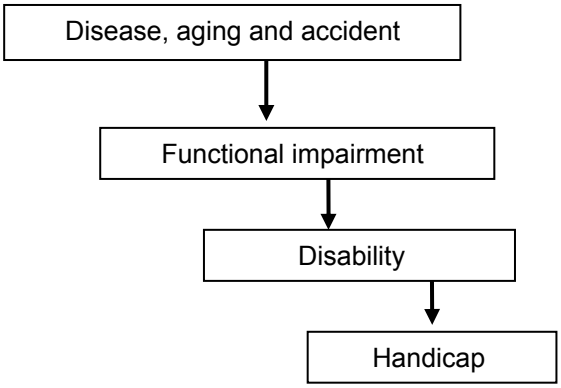

Figure 2: The process of being impairment, disability and handicap.

Scherrer (2001, pp: 38) gives an example about how handicap could come into being for a person;

Impairment: Spinal cord injury

Disability: Incapability in walking

Handicap: Cannot go out home

That is to say, if a disabled person can go outside his flat, go down in the elevator, and exit the entrance door by using a ramp, he/she will not become a handicapped person. Scherrer (2001, pp: 38-39) adds that architecture can create or eliminate handicaps. Sürmen (2001, pp: 44) supports this discussion and

declares that while impairment and disability are objective concepts, handicap includes an interpretation. Handicapped may be hindered in an ideal urban environment.

If the built environment responds to human differences like age, health, physical and mental abilities, handicap will not be created anymore at least in the spatial level. It should not be forgotten that a normal and able-bodied person cannot jump across more than a definite width either.

2.1.2.3. Mobility Limitation

There is one more concept concerning disability and accessibility: mobility limitation. Most people in the society use the built environment independently and naturally and they are not aware of the fact that accessibility is one of the fundamental criteria for built environments (CCPT, 1995, pp: 12). Since many individuals have 'deviant' bodies or are out of normal criteria, spatial arrangements are not easily accommodated in 'standard' (Freund, 2001; pp: 692). Therefore, some people may experience certain difficulties in an unfriendly built environment when they face barriers or when they cannot use the demanded additional equipment and accordingly they are limited in terms of mobilisation. Therefore, such people can be described as mobility limited people. Pedestrians, on the other hand, whether young or old, are thought disabled because of their being vulnerable and mobility limited from a traffic viewpoint (Ramsay, 1990, pp: 62).

For understanding more about the conception of disability, Davies mentions English Royal Town Planning Institute's (RTPI) description. Indeed, this description gives us a mobility limitation framework:

> Disability includes a wide range of conditions: it covers more than the obvious such as blindness or confinement to a wheelchair. Breathlessness, pain, the need to walk with a stick, difficulty in gripping because of paralysis or arthritis, lack of physical co-ordination, partial sight, deafness and pregnancy, can all affect a person's mobility in the environment. Access for the disabled will also benefit parents with buggies and the elderly (RTPI, 1985, pp: 1; cited in Davies, 1999, pp: 75).

Therefore, apart from people with disability, those disabled temporarily as a result of an accident, children, people carrying luggage, people too tall or short, or obese people can be added to the list above as mobility limited people. These

people require some arrangements in the built environment in order to have easy and comfortable mobility.

In sum, arrangements of creating barrier-free places will serve not only disabled people, but also others with a certain mobility limitation.

2.1.3. Types of Disabilities

Disability has been divided by Golledge and Stimson (1997, pp: 491) into ten different categories by adding a number of other sub groups apart from the main disability groups:

1. Lack of physical mobility (e.g., requiring assistive tools such as wheelchairs, crutches, walkers, etc.).
2. Vision impairment and blindness.
3. Speech impairment (or language deficiency).
4. Hearing impairment or deafness,
5. Haptic impairment (e.g., touch insensitivity, crippling by disease such as arthritis).
6. Cognitive impairment and brain damage (e.g., difficulty in handling spatial problems, short-term memory problems, or being dominated by anxiety or stress).
7. Reading impairment (e.g., dyslexia).
8. Phobias (acrophobia, claustrophobia, and so on).
9. Mental challenges (e.g., mild, moderate, and severe retardation).
10. Suffering from debilitating diseases (e.g., cancer, heart diseases).

It is possible to increase the number of such taxonomies. For example, four groups and their sub groups are common in the literature according to the needs in the built environment:

1. people with orthopaedic disabilities
    a. people with walking difficulties
    b. people with arm or hand deficiencies
    c. people in a wheelchair
2. people with visual impairment
    a. partially sighted people
    b. blind people
3. people with hearing and speech impairment
    a. partial hearing impairment
    b. deaf people

4. people with mental retardation

Apart from these four groups, there are two additional groups related to disability:

5. mentally ill people
6. people with chronic illnesses

The needs of these two groups in terms of mobility should be thought in the frame of the four main groups.

2.1.4. Needs of People with Disability in Space

It is important to understand the demands of people with disabilities and realize that they are not a homogeneous group and have different body experiences before planning, designing and refurbishing built environments providing easy, independent and comfortable movement. Not only do different disability groups need different arrangements for mobility, but different detail requirements should also be considered under the main disability groups.

Barnes and others (1999, pp: 117) mention Goldsmith's (1976, pp: 16) observation about building designs for two-legged able-bodied people and not for people depending on sticks or rolling devices. Although this determination belongs to approximately thirty years ago, the picture drawn by Goldsmith still presents current conditions of people with disabilities and built environment.

2.1.4.1. People with Orthopaedic Disabilities

a. People with walking difficulties: These people either can move with some difficulty or depend on assistive devices for mobility. They cannot go long distances and they experience problems when faced with level differences. There is also a need for necessary places for assistive devices like walking sticks, canes, crutches, walkers etc.

b. People with arm or hand deficiencies: These people can either use their arm or hands with difficulty or cannot use them at all. Other orthopaedically disabled people, such as people with arm or hand deficiencies need to grasp easily and use all equipment with less effort.

c. People in a wheelchair: These people can only move with the help of a manual or motorised wheelchair. The person using a wheelchair needs suitable manoeuvre and circulation space, and even if he/she can move with a companion, different measures are required. Because a wheelchair can go through a horizontal distance of 4,50 cm. and vertical difference of 2,00 cm. (ECMT, 2006, pp: 61), elevators for vertical mobility, ramps with suitable gradient to overcome level differences, wider doors and corridors, entrances providing appropriate place for manoeuvre, adapted toilets with handrails, and manoeuvre places are the main needs of wheelchair users in space.

In addition to architectural refurbishment, many assistive devices meet some independency and mobility needs of wheelchair users. While motorised wheelchairs and adapted cars are examples of personal assistive technology, some are a part of the built environment like stair lifts, platform lifts and hydraulic elevators.

2.1.4.2. People with Visually Impaired

In their study on visually impaired people, Butler and Bowlby (1997, pp: 422) list different visual disability characteristics as short or longsighted, one or two eyes affected, congenital or later impaired, visibly apparent or not.

a. Partially sighted people: These people can see to some extent, so they need to improve their visual sense capacity. Colour contrast and large printed information materials are the main needs of partially sighted people.

b. Blind People: Blind people cannot see anything, therefore it should be comprehended that they need much effort, much attention and concentration, use a great number of reference points and a remarkable memorisation capacity (Passini, 1986, pp: 906; cited in Golledge and Stimson, 1997, pp: 513).

Golledge and Stimson (1997, pp: 506-507) respond to how blind people obtain more information about their environment. They write that there is a need for information in the mode of spoken words, auditory localisation or touch for people without vision. However, these may be inadequate in a complex environment. In these circumstances, the person's long term memory, spatial abilities and cognitive map including facsimile information about the objective environment should be used as navigational and wayfinding aids. Blind people, on

the other hand, need both of *environmental cues* and information about the *characteristics of the route* and general *layout information*. Besides, particular *wayfinding skills* are developed by visually impaired persons who also use a guide dog or assistive devices as *orientation* and *mobility aids* like white canes and sonic obstacle sensors. As a sensory impaired group, tactual maps appear as one of the solution in way finding problems of visually impaired people (Park et al., 1998, pp: 214). Since new routes create difficulty for those people, Golledge (1994, cited in Park et al., 1998, pp: 215) as a visually impaired author suggests that GIS/GPS navigation systems and tactual maps as assistive devices will give such people easier navigation without experiencing fear and panic.

According to a study conducted by Casey (1978, cited in Golledge and Stimson, 1997, pp: 510-511), partially sighted persons make route description maps superior in organisation and accuracy than congenitally blind persons' maps.

2.1.4.3. People with Hearing Impairment

Rodaway (1995; cited in Park et al., 1998, pp: 216) asserts that the perception of space by people with hearing impairment pivot primarily on different senses in order to facilitate understanding of space and place.

a. Partially hearing people: These people can hear with hearing aid device and obtain information and can communicate with visual information materials and common loop systems. Suitable and adequate visual information are certain necessary arrangements in space.

b. Deaf people: They cannot hear anything and they can only understand when information is provided visually.

2.1.4.4. People with Mental Retardation

As a historical fact, mentally retarded people have been exposed to more discriminatory and exclusionary implementation than other disabled people owing to being regarded as outcast of societies and being forced to live in institutions. In recent decades, deinstitutionalisation has been realised through caring for the mentally retarded, especially mildly or moderately retarded ones, within families, friendship circles, group homes or halfway houses and integrating them to the community (Golledge and Stimson, 1997, pp: 526).

According to Parr (1997, pp: 439), mobility and participation to public space is as difficult for the mentally retarded as it is for people with physical disabilities.

> Differences in bodily capabilities, physical appearances, and social behaviour in public space appear to be a key issue. Differences are not planned for in terms of physically allowing access to people with impairments, and also not readily tolerated because they often involve 'inappropriate' forms of behaviour and appearance (Parr, 1997, pp: 439).

People with dementia, on the other hand, constitute one special group whose needs are quite different from others. Because everyone could develop dementia if they lived long enough (Whitehouse, 2000; cited in Blackman et al., 2003, pp: 359), the design considerations that aid navigation and comfort serving cognitive differences like poor memory and occasional confusion and disorientation in built environments have great importance. The outdoor environment gives a necessary message to older people that they can read surroundings, understand where they are and decide how they can reach their destination. Furthermore, people in this group are more open to the effects of a damaging environmental design than other people (Blackman et al., 2003, pp: 359, 365).

2.1.5. Socio-spatial Production of Disability

2.1.5.1. Conceptualization the Bodily Experience of Disability in Space

All of the changes in space affect human life in one way. For disabled people, space plays a vital role in terms of its organisation and relations emerging there. Before investigating how space should be designed to support all the activities of people with disabilities, the body with its simple experience in space will be discussed in this part of the study.

Frank (1991, pp: 48; cited in Butler and Bowlby, 1997, pp: 418) proposes that discourses, institutions and corporeality constitute the body, which is a statement based on Gidden's structuration theory. In this context, he defines the body as "both medium and outcome of social 'body techniques'" and society as "both medium and outcome of the sum of those techniques". Butler and Bowlby interpret this statement by establishing a relation with disabled people and their experiences in the built environment like Barnes (1991), Hahn (1986) and Imrie (1996):

> …a disabled person's experience of the barriers to their mobility in the public built environment will result from the interaction of their own and others' lived interpretations of discourses concerning disability and publicly acceptable behaviour with the organisation and outputs of those institutions concerned with the design and construction of the built environment … and their individual corporeality.
>
> The body is not a passive and fixed 'fact' onto which social relations are mapped, but nor can what seem to be physical experiences of the body simply be accepted as 'facts' which are prior to or determinative of these social relations (Butler and Bowlby, 1997, pp: 430).

Oliver (1996; cited in Freund, 2001, pp: 692) suggests that the body as an isolated and individual body is a limited determinant of disability, but the '*body in situ'*, the body engaged a particular socio-material structure, is highly relevant to disability. To give relation between body and disability, it is useful that all of the impairments, physical-mental differences and their relationship to socio-cultural arrangements are the issue of the body. Everybody becomes a different individual according to being very tall or short, small or large and 'one size fits all' socio-material environment make them disabled. According to Robins (1995, pp: 53; cited in Imrie et al., 1996, pp: 1257), cities contain bodies in motion, and the city life is about the experiences of, and shocks to, those bodies.

Whilst everybody has different bodily characteristics, what does it mean to live in ableist environments and societies? The answer comes from Chouinard:

> Ableism refers to ideas, practices, institutions, and social relations that presume able-bodiedness, and by so doing, construct persons with disabilities as marginalised, oppressed, and largely invisible 'others'. This presumption, whether intentional or not means that one's ability to approximate the able-bodied norm, influences multiple facets of life: such as the character and quality of interpersonal relations, economic prospects, and degrees of physical and social access to various life spaces (Chouinard, 1997, pp: 380).

2.1.5.2. Disability in Social Space

Space is permeated with social relations; it is not only supported by relations, but it also producing and produced by social relations (Lefebvre, 1979, pp: 286; cited in Gleeson, 1999, pp: 45).

Imrie explains social and spatial relations by using Massey's statement;

> The social and spatial are mutually entwined and constitutive insofar as social relationships and processes cannot exist outside of space, but are constituted in and through particular place-based social structures or

what she refers to as ‘spatialities’ (Massey, 1996; cited in Imrie, 2000 (b), pp: 6-7).

The important role of space should be emphasised here;

> Space is …important because of the way its organisation constructs bodies and offers bodily possibilities and constraints. The body is not simply a culturally constructed representation nor is it physically shaped like clay by social force, but it is experienced and ‘lived-in’ differently in various socio-material environments and material cultures…(Freund, 2001, pp: 695).

Lefebvre’s discussion of social relations which can also be derived from Massey’s and Imrie’s explanations, appear mostly as oppression, exclusion, segregation and any other form of negative relations towards disabled people in space. Gleeson (1999, pp: 137-138) mentions that disability oppression in cities realised in two ways; physical inaccessibility creating ‘social oppression because it reduces the ability of disabled people to participate fully in urban life’ by excluding them from particular spaces and ‘socio-spatial exclusion in institutionalised forms’.

The first form of socio-spatial exclusion is produced trough several apparent and implicit practices in urban life. When exclusionary attitudes in employment realms, unsuitable and insufficient housing combine with inappropriate accommodation, cities become ‘no less than “invisible gaols” for disabled people’ (Gilderbloom and Rosentraub, 1990, pp: 271; cited in Gleeson, 1999, pp: 139).

The second form that shows four spatial dimensions of treatment for the mentally ill is explained by Dear (1981, pp: 491) who studies the mentally ill and space. Whilst a defined place forms the *enclosure*, internal spatial organisation describes each unit as *partitioning* of space. Moreover, *functional sites* are used as integral architectural defined space and lastly, *rank* is about hierarchical classification. Imrie (2000 (b), pp: 7) carries on this explanation by giving specific examples about disability. The asylums, special schools, day care centres and other special arrangements and services are distinct places that people with disabilities are demarcated and segregated from the rest of the society by creating particular spatialities in which the identities, mobility and other social interactions of people with disabilities are created.

Mathews and Vujakovic (1995, pp: 1069) notes that society should not be conceived as comprising a homogeneous and unitary culture anymore. There are broad textures, identities, and fractures which constitute plurality of culture and

different patterns of relationship are formed with the dominant society. However, as a minority group disabled people are the subject of the negative relations dominated by the other part of the population.

Although placed in a feminist study, Butler and Bowlby (1997, pp: 416) gives the duality created by the society as follows:

self: other	human: animal
mind: body	rational: irrational
culture: nature	masculine: feminine

one more category can be added in the frame of the study as;
able: disable.

'Who is the other?' Golledge and Stimson (1997, pp: 490) first ask the question and then respond as follows:

> 'The other' [is] groups who are discriminated against, who face significant physical, psychological, and societal barriers that produce disability. They are the disenfranchised, the maltreated, and the ignored members of society. They are the ethnic, religious, nationalistic, and cultural minorities who are often denied equal opportunity and equal access to the advantages and benefits of the society in which they reside.

Sibley (1992, pp: 107; cited in Mathews and Vujakovic, 1995, pp: 1069) asserts that social boundaries define who belongs and who does not, consequently some social groups are excluded through legitimisation by being defined as 'other' or residual beyond the boundaries of the acceptable. Dear and others (1997, pp: 455-457) mention the boundaries in the discussion of *difference*. Apart from dominant religious doctrines, cultural traditions, prevailing political economy, medical knowledge define space as a factor influencing the difference phenomenon. The distinctions between the self and surroundings, 'I' and 'not I' serve the partition and boundary maintenance process which is also spatial. As a consequence, attitudes towards people with disabilities are socially and spatially produced, and 'keeping others in their place' is an explanatory statement for this production.

The majority of the society does not want to see and interact with its failures. People with disability are one of these groups on which many

unnecessary positive attitudes (pity or solicitude) and negative reactions have been developed. As body and actions may be different from the 'normal' form of the society because of their sense or motor problems, they may be fearful and odd for the rest of the society. The approach with pity or hostility, on the other hand, activates people for helping unnecessarily to people with disability as if they always depend on assistance of someone as subordinate individuals (Butler and Bowlby, 1997, pp: 420) or as if they are impure, defiled, contaminated or dirty people (Kitchin, 1998, pp: 351). Cresswell (1996, pp: 16; cited in Kitchin, 1998, pp: 350-351) gives an important dimension of this process that the majority, in other words able bodied part of the population, is not aware of the inaccessible and exclusionary practices in the society because they unconsciously accept them in daily life, naturally.

Chouinard (1997, pp: 383-385) placed Dear and Taylor's (1982) study which reveals a hierarchical ranking through types of disabilities from at least to most preferred types. Having important locational and social results, collective consciousness and perception gain importance. Dear, furthermore, mention about boundaries which distinct space as 'us' and 'them'; the hierarchical ranking of the acceptability of different disabilities define these spatial boundaries.

> Concepts of and attitudes towards 'disability' affect disabled people's ability to move freely within public spaces…changing the physical environment is indeed essential to improved access to public space for disabled people but also is changing the social environment, and in particular, changing social attitudes and behaviour towards disabled people (Butler and Bowlby, 1997, pp: 411).

Dear and others (1997, pp: 473-474; cited in Chouinard, 1995, pp: 139-141) explain this relationship that the environment does not accommodate the needs of a wheelchair user: it actively marks this person as *different* and creates the situation of *out of place*. In this continuity, a non-disabled person stands distinct from the disabled person. In contrast, if environment is designed in an appropriate way and provides easy movement for wheelchair users and walkers, the differentiation will disappear and a positive perception will be constituted through proximity in contrast to separation. Moreover, this link refers to a reciprocal relation that when physical environment enables people with disabilities to be present in public space, attitudes of society will change positively towards people with disabilities. Then, more positive attitudes of the society should affect

accessible physical planning and addressing the needs of people with disabilities (Butler, 1995; cited in Butler and Bowlby, 1997, pp: 412).

An investigation conducted by Currie and others (1989, pp: 298, 306-307, 312) reveals one more dimension of spatial exclusionary attitudes in the neighbourhoods. They studied whether people were reluctant for placement a mental health facility in their surroundings, or not. Firstly, when they asked if a health facility's placement in their neighbourhood unit was desirable or not, 41% of respondents replied that it was desirable while 39% said it was neither desirable nor undesirable, and 20% said it was undesirable. However, this attitude table changes with respect to the location of the health facility in their block. 35% of respondent is desirable and 32% is undesirable. In order to throw light on these attitudes, opposition is originating from perceiving the mentally ill as dangerous and people tend to maintain a distance from mentally ill people.

> The formation of identity is a process of situating self in space, which often involves imposing a literal boundary between self and Other. The integrity of the individual is threatened when the spatial partition of that boundary is compromised. This threat is minimized when the social distance is sustained and complemented by spatial separation. The proximate presence of difference and the transgression of established boundaries run counter to the well-being of individual identity because they challenge the territorial position of the self (Dear et al., 1997, pp: 461).

As chronically ill, people with dementia prefer to stay at home generally because they feel social stigma related to their behavioural actions like 'aimless wandering' or 'aggression' (Bond and Corner, 2001, cited in Blackman et al., 2003, pp: 362).

The barriers of course are one of the main components of this nested set of processes. Many examples are given by Kitchin (1998, pp: 346-347) that steps with no ramp, places linked by inaccessible public transportation, and some forms of planning systems like car-designed cities, out-of-town centres are implicitly and explicitly designed 'no go' areas of urban space. In addition, some designs and implementation are the examples of *segregation and protection the public form and disabled people and vice versa.* Several institutions are apparent examples of segregated places as mentioned as exclusionary implementation before. Other examples can be called more implicit marginalising implementation such as

accessible, asexual and locked toilets, passing and place reserved for wheelchair users at side or behind the other areas of normal users.

Because we cannot separate space from social relations, we should think about how disabled people can integrate into the society and all of its spaces. We should accept that disabled people are different in several aspects from most of the society. However, it is possible to increase or decrease the difference between them and the society. Ablelist or designed spaces for able-bodied persons increase this gap undoubtedly.

2.2. Accessibility

Kraus et al. (1996; cited in Stark, 2001, pp: 38) report that one in five people need assistance and cannot realise actual performance while performing daily activities in the United States of America. On the other hand, Davies (1999, pp: 74) notes that by the year 2041, nearly a quarter of the British population will be older than 65 and 9% will be over 80, and this that this situation will result in a greater number of people in society being exposed to some negative effects in their environments. Therefore, the barrier-free or accessible built environment will gain more importance in the future.

Imrie (1998, pp: 133) mentions that in the post war period the built environment has been created in order to give priority to mobility with cars. It can interpreted from his explanation that accessibility has been sacrificed to the perception that all people have the same ability in this segregated and exclusionary built environment.

Matthews and Vujakovic explain the relationship between this process and the formation of urban space:

> The vision of town planners and architects implicitly reflect the dominant perceptions of a society, such that groups already at the edge become further marginalised by policymaking… All too often, the built environment, as experienced by those who are physically challenged, is marred not by their physical disabilities but by decisions taken by the able-bodied for the able-bodied…Cities are literally crippling when members of their population are restricted from reaching their full potential because of poor information, planning and design (Matthews and Vujakovic, 1995, pp: 1069-1070).

2.2.1. Accessibility in General

> Accessibility is a profoundly important dimension of produced space which is sourced in the ensemble of political-economic and cultural dynamics that shape built environments (Gleeson, 1999, pp: 199).

As current environments, buildings and services prevent disabled people from moving around adequately, it is clear that we need to reconsider the way we manufacture spaces. Accessibility; a feature of spaces purified of barriers is accepted as the solution for the free mobility of disabled people in this study.

Accessibility can be described as a combination of different definitions 'reaching and using *everywhere* and any service as desired *independently* by *everybody'*. The concept placed in this definition should be investigated carefully;

Everywhere: All people should be able to reach and utilise spaces and services in societies where they want to reach and use them, equally with other people. Cities should give the opportunity of use of all places by everybody living there through basic rights.

Independently: The user can reach and utilise any spaces himself/herself. If he/she needs a companion or assistance in using a facility, it cannot be said that accessibility achieves its goal.

Everybody: The user apart from able-bodied, not only disabled people but all the people having permanent or temporary time mobility limitation require many arrangements in space.

Davies and Lifchez (1987, pp: 40) suggest that accessibility includes much more than physical access to a building or other facilities. It also includes the quality of socio-psychological experiences:

> …A place that supports people's activities and desires permits them to be and do what they want, and causes them a minimum of pain, frustration, and embarrassment is more accessible than a place that confuses, harasses, or intimidates people. Many ostensibly accessible site differ substantially in the quality of experience they offer.

Jensen (et al, 2002, pp: 231) gives accessibility as one aspect of the person-environment relationship. In this viewpoint, there is a need of knowing more about person and environment as components. Here accessibility is considered the relation between functional capacity and environmental demand and hence a balance should be achieved by making appropriate changes. Whilst a

person's capacity can be developed by functional training, environmental demands can be enhanced with suitable and comfortable arrangements.

An accessible building is described by Scherrer (2001: 39) as one which allows a person with a deficiency, a wheelchair or sensory impairment especially to enter, circulate comfortably, exit and utilise all of the services provided there, under normal conditions. Accessibility can be thought as a chain and if one of the rings is broken, it cannot be accessible (Scherrer, 2001: 42).

Blackman (et al., 2003, pp: 357) emphasises that the relation between social model of disability and the issue of universal rights is tightly connected with environmental planning and design. Existing environments created by planners and designers play two fundamental roles when they are evaluated from the point of view of people with disabilities; they are oppressive owing to neglecting needs of people with disabilities and ablelist values are positively asserted. He exemplifies these situations firstly with a quotation from Imrie (2001, pp: 232; cited in Blackman, et al., 2003, pp: 357) which focuses on 'architectural apartheid'. While underground stations without lifts present *'no-go' areas* to mobility-impaired people, stairways in public buildings cause strict problems for visually impaired, frail and elderly people because of their effect on distance and speed, which are the examples of this apartheid.

> The performance of everyday activities consists of complex relationships between the person, his or her activities and the environment (WHO, 2001; cited in Jensen, et al, 2002, pp: 231).

It is further put that "mobility gives people the opportunity to develop themselves socially and economically" (Maat and Louw, 1999, pp: 160; cited in Imrie, 2000 (a), pp: 1642). Therefore, cities should seek to accommodate all individuals and enable them to satisfy their life needs without distinction between the elderly, children, or the disabled. Such places enable people to live in their own home independently, to access public buildings and to participate in community activities in everyday life. Accessibility therefore encompasses both public and residential buildings. Freund (2001, pp: 699) also refers to mobility in terms of risks in contemporary cities. A traffic flow managed by signals, pedestrians, cyclists and other vehicles are dangerous for road users who require self-control and to be aware of risks in mobility.

The accessibility concept is described by the United Nations (www.un.org/esa/socdev/enable/disacc.htm) as direct being directly related to efforts to enhance the equalisation of opportunities for people with disabilities. This description includes the freedom of choice in entering, approaching, communicating with or making use of a situation.

Access should have these dimensions;

- Orientation, Who - do you have information you whish?
- Independence, What – do you choose what you wish to do?
- Mobility, Where – do you go where you wish?
- Occupation of Time, When – do you engage when you wish?
- Social Integration, With Whom – are you accepted by others?
- Economic Self-Sufficiency, With What – do you have the resources you need?
- Transition, Change – are you prepared for change? (United Nations, www.un.org/esa/socdev/enable/disacc.htm)

Matthews and Vujakovic (1995, pp: 1070-1071) found that while urban planners consider movement and the ability to change location, for wheelchair users and other users, their ability to make a difference cannot be assumed since the way urban societies are organised result in them being handicapped. Such an urban organisation includes many barriers which are imperceptible to able-bodied people and may hinder or restrict access of disabled people. A built environment therefore has characteristics in addition to aesthetic and construction criteria.

Physical inaccessibility is about not only about macro land use patterns but also integral to the design of buildings. When the inaccessible built environment is examined, it is useful to again make mention of Gleeson's (1999, pp: 137) examples handled under four topics:

1. Physical barriers such as broken surfaces on streets or paving which reduces or impedes the effectiveness of mobility aids like the wheelchair, walking aids etc., which can be categorized as barriers in open areas,
2. Architecture which reduces or impedes people with disabilities from entering and using a building,
3. Public and private transport designed for the non-impaired,
4. Public information like signage that assumes common visual and aural ability.

In an investigation by Losinsky and others (2003, pp: 305), accessibility is elaborated not only in terms of access to buildings (and services, facilities etc. in general), but also with the added time and distance used by the disabled person.

Although it is developed in an investigation study, this approach should be a part of accessibility assessment since extra time and distance used for reaching to or benefiting from a place, facility or equipment is very important for people with disabilities. The American Access Board (cited in Losinsky et al, 2003, pp: 305) also emphasises that this situation should be considered in architectural design.

Technical solutions are also important for creating accessible environments. Several technological solutions for the constructed environment such as mechanical lifts, platform and stair lifts, climbing stairs can be used for compensation of level differences, and similar mechanisms are available for transportation modifications. Apart from wheelchairs, other personal mobility aids should be known and used by professionals working on the built environment.

Accessibility can be investigated in four different aspects in a city, where it is suggested that there are physical inaccessibility areas:

1. Open spaces,
2. Buildings,
3. Public and private transport,
4. Information services.

In the design process of all these areas, particular criteria should be considered as a necessity of accessibility.

2.2.2. Design Criteria for Accessibility

According to Lifchez (1987, pp: 20), the environment where experiences of bodies are shaped is an arena and social conflicts are played out. The reason of these conflicts can be derived from Hahn's suggestion (1986, pp: 273; cited in Gleeson, 1998, pp: 90) claiming that most cities are designed not only for non-disabled people but also for an ideal person who can be delineated as a white, adult and middle-aged, able-bodied man.

When designing for people with disability, the aim should be functional as much as possible to eliminate the gap between designers and users of the buildings. If the developmental and functional needs of disabled people were considered as design criteria, this congruence would be completed more easily (Ferguson, 1997, pp: 253-254).

Adaptive environments are explained by Ferguson (1997, pp: 256,257-258) in detail. For people with disabilities, when the environment affords independence and environmental mastery, they have the opportunity of choice in

the environment. In this process, it should not be forgotten that users with disability should be integrated into society by making special arrangements to a regular environment. Moreover, the principles of a most facilitative environment should be included in the design process instead of the concept of a least restrictive environment.

Ferguson (1997, pp: 258-259, 264) gives safe, convenient, flexible, barrier-free and enabling people for choice, independence and control as the characteristics of the environment that designers should consider. Ferguson gives also that quality of life is only realised with freedom of choice, personal satisfaction, integration with community life and social interaction and support. Accordingly, the characteristics of the environment are the fundamental and important variables in this context. Therefore, adaptive and barrier free environments; safe and free access to public spaces and facilities, buildings and the other fields of social life will certainly raise the quality of life of people with disabilities.

In addition, designers must consider the same needs of people with disabilities with other part of society as a choice of housing alternatives, a satisfying job, adequate income, recreational opportunities, etc. This list can be extended indefinitely. However, these natural human needs based on citizen rights are restricted or impeded by obstacles situated in the built environment. Ferguson gives some examples; many typical and different design features that vary from stairs to water taps or door knobs may create some difficulty in use for a person with loss of co-ordination, arthritis or an amputated arm. These design features form the most difficult implementation for wheelchair users such as narrow and/or heavy doors, stairs, small washrooms, inaccessible public transportation and elevator buttons situated too high.

The characteristics of the accessible environment mentioned above should be emphasised as design principles. As a design principle, first of all **safety** should be included in a design process in order to prevent accidents. Whilst safety glass and non-slip walking surfaces should be evaluated as a part of an implementation, handrails and call buttons for calling assistance in a need or danger should be thought as additional equipments (Ferguson, 1997, pp: 260). Safety is especially important for people with dementia. Independent living may bring together disorientation, difficulty reasoning and understanding and incontinence and emotional difficulties for people in this group (Blackman et al.,

2003, pp: 359). Further design principles for a safe built environment are given by Mitchell and others (2003, pp: 618) as; familiarity, legibility, distinctiveness, accessibility, comfort and safety.

The next principles for designers are **comfort** and **convenience,** which have already been mentioned for people with dementia. For realisation of these principles, different disability groups require special arrangements in the environment originating from their different needs. For visually impaired people, orientation is vital in the built environment as it facilitates them in finding their way. Colour coding or universal pictographs can be used to orient people in places. Likewise, sheltered entrances, adapted toilet facilities, modified kitchens and wide corridors are examples of comfortable and convenient arrangements for people with disabilities, especially for wheelchair users. For mentally retarded people arrangements that create the auditory, visual and tactile senses are important for the purpose of providing essential orientation and use convenience (Ferguson, 1997, pp: 250-261).

Control or self control is other design criterion for the built environment. Ferguson (1997, pp: 262) notes the principle by exemplifying that the barrier free environment fosters a sense of control owing to one being able to move around independently. Furthermore, if a person with a disability tries to utilise something in the built environment and this attempt ends with a failure, he/she will stop trying to use such facilities. On the contrary, when a person finds a solution without anyone's help in a barrier free environment, they make more effort to participate in social life.

One more design principle is **choice** which is given with control by Ferguson (1997, pp: 262-263). Greater choice and opportunities enhance not only feelings of control of users but also their privacy and sense of personal space and territory in the built environment.

Knudson (1999, pp: 1) adds the other three criteria as mobility, function and dignity. While **mobility** is about sufficient room for especially wheelchair manoeuvre, the **function** is evaluated by using kitchens, bathrooms and doorways through facilities. The design criteria for mobility can be expanded to situations where people use a crutch or a white stick, or need more space than other people for mobility. Functional criteria, on the other hand, can be integrated into spaces like ramps, entrances, elevators and circulation areas where suitable materials, buttons, additional assistive devices etc. should be fitted. The last criterion given

by Knudson is about use of the same route, the same entrance and the same facility or service for both people with disabilities and other users. Rear entrance to buildings or service elevators are contrary to protecting the **dignity** of wheelchair users. An example that occurs in everyday life is where a decision not to provide a suitable ramp as an alternative to entrance stairs requires the wheelchair user be carried to the entrance level of a building by other people. A comment is given by Imrie and Kumar (1998, pp: 366; cited in Blackman et al, 2003, pp: 358) that disabled people repeatedly assert that 'no one considers our needs and we feel we go outside'.

Whilst design principles are discussed, there is a need to emphasis strongly that 'design for the disabled' is open to be an instrument for feeding particular exclusionary attitudes. Davies (1999, pp: 74-75) asserts that 'planning for the disabled' is a segregated or divisive approach and is concluded with a special system for people with disabilities. Instead of a separate external ramp on the side of the stairs, inclusive solutions are needed as design considerations integrating people with disabilities into design process. As a consequence, the access is a compound of the design not an add-on extra part (Manley, 1996, pp: 139). Imrie (1996; cited in Davies, 1999, pp: 76) adds that the solutions in the built environment are not realised in order to make people with disabilities pleasant, but to make best implementations.

2.2.3. Physical and Social Barriers in the Built Environment

Alternative Planning Group (APG) from Canada gives some factors which play a role as obstacles beyond inclusion to community in the city. Multiple barriers to gaining access to employment and meaningful mechanisms for participation in the civic and political life of society are two of them and can be considered as relative to people with disability and their life style in the city.

Imrie (2000 (a), pp: 1641, 1643) asserts that existing patterns of transportation and related infrastructure limit mobility and movement of most of the population. He also makes mention of barriers and the way they impact people with disabilities such as restricting their mobility, preventing their mobility or a rendering a mobility which emphasises their impairment and difference.

People with dementia as a disabled group face with many barriers in the outdoor environment, for instance; shopping centres or parks are places they find disorientating, difficult to interpret and navigate, threatening and distressing.

Moreover, coarse-textured floors may limit walking performance, sharp colours or pattern contrasts may cause some people to misinterpret level differences (Blackman et al., 2003, pp: 357, 364).

A project was undertaken by Matthews and Vujakovic (1995, pp: 1072-1076) with ten wheelchair users regarding their personal geography, an urban mapping exercise, and their 'way of seeing' urban places. Many significant barriers to wheelchair users are determined in the study:

Table 1: Environmental barriers which impede mobility in urban areas, in rank order (Matthews and Vujakovic, 1995, pp: 1075).

Rank	Barrier
1	High kerbs and/or of dropped kerbs
2	Steep gradients or ramps
3	Uneven paving slabs
4	Rough or cobbled surfaces
5	Slippery surfaces
6	Narrow pavements
7	Street furniture poorly placed, restricting access
8	Congested pavements
9	Steps without adjacent ramp
10	Dropped kerbs on roads not adjacent to each other
11	Difficult camber on pavements
12	Deep cutters along roadside, impeding crossing
13	Busy roads
14	Lack of resting places on slopes and ramps
15	Handrails not provided on ramps
16	Insufficient designated road-crossing places
17	Drains near to dropped kerbs
18	Cars parking adjacent to dropped kerbs
19	Raised manhole covers at road-crossing points
20	Poor pathway maintenance leading to problems of fouling by dogs and litter

Note: Categories 1-8 were mentioned by more than 50% of respondents.

These barriers are grouped in the next step of the study as surface conditions (including smoothness of surfaces, surface conditions, steepness of slopes, narrowness of paths, crowdedness), special obstacles and barriers (including position of dropped kerbs, steps) and special facilities' location (types of crossing places, toilets, public telephones, benches, cash-dispensing points, car parking spaces) (Matthews and Vujakovic, 1995, pp: 1076-1077).

In the same study, not only architectural and other barriers in the built environment are revealed but also particular outcomes indicating significant differences in terms of behavioural and environmental needs of wheelchair users from people without loco-motor problems introduced by the personal geography of the wheelchair users are investigated. The first outcome is about respondents' perceptions, interpretations and meaning of environment which are different from each other. The next point is on restrictiveness of environmental settings for wheelchair users, which impedes them more than other groups. The difference between land uses and the facilities of wheelchair users constitutes the next outcome. The fourth topic is formed by environmental transactions whose threats and frustrations are often considered by wheelchair users while others are not. The planning and decision making does not satisfy the needs of people in mobility difficulty sufficiently, therefore an 'outsider' group image is created for disabled people, which is the next result. The last one is about exclusionary urban environment organisation that gives the sense of being 'other' for wheelchair users.

Steinfeld et al. (1977, pp: 25; cited in Matthews and Vujakovic, 1995, pp: 1073) summarise the situation of wheelchair users in the built environment by giving the different reaction between able-bodied and disabled people who stand in front of a set of monumental stairs and how the same environment can be read in different ways by different groups:

> A person confined to a wheelchair cannot negotiate monumental stairs. Rather than having a sense of awe and respect, such a person is likely to feel angry at that which is above (Steinfeld et al., 1977, pp: 25; cited in Matthews and Vujakovic, 1995, pp: 1073).

Apart from lack of automatic doors and ramps in public buildings, the absence of people with sign language skills, reading materials not in Braille form etc. appear as barriers for visual and hearing impaired people (Chouinard, 1997, pp: 380).

Golledge and Stimson (1997, pp: 493-494) present not only physical barriers but also human interaction ones which affect different disability groups' daily life and mobilisation. According to this study, they believe that wheelchair-bound and the blind or vision-impaired people face the greatest quantity and variety of barriers.

Table 2: Physical barriers for disabled persons

Visually Impaired	Age	Wheelchair
Construction/repair	Stairs	Construction/repair
Weather	Door handles	Surface textures
Lack of railings	Door latches	Layout
Ramp availability	Door closures	Gradient
Elevators	Ramp availability	Design features/utilities
Distance	Distance	Unprotected natural features
Door location	Elevators	User accessibility
Door handles	Lack of rails	Weather
Door latches	Gradient	Stairs
Door closures	Unprotected natural hazards	Lack of rails
Non-standard fixtures	Weather	Ramp availability/curbs
Traffic hazards		Elevator
Travel access		Distance
Surface textures		Doors-width, handles location, closures
Overhead obstructions		
Lack of barriers		
Lack of cues		
Gradient		

Table 2: Physical barriers for Disabled Persons (continued)

Otherwise Physically Disabled	Phobic
Construction/repair	Stairs
Weather	Lack of rails
Unprotected natural environments	Elevator
User access	Distance
Stairs	
Lack of rails	
Ramp availability/curbs	
Elevator	
Distance	
Doors	
Gradient	

Table 3: Human interaction barriers for disabled persons

Visually Impaired	Hearing Impaired	Age	Learning Disabilities
Signs	Travel access	Traffic hazards	Traffic hazards
Layout	Auditory cues	Signs	Signs
Unprotected natural hazards (bodies of water, cliffs, etc.)		Layout	

Table 3: Human interaction barriers for disabled persons (continued)

Retardation	Wheelchair	Otherwise Physically Disabled	Brain Damage
Traffic hazards	Traffic/transit	Design utilities	Traffic hazards
Signs	Signs/symbols /icons	Traffic hazards	Signs
Traffic access	Travel	Travel Layout	Travel Lack of cues

Imrie (2000 (a), pp: 1645-1649) investigates how disabled people's movement and mobility were restricted or channelled by architectural barriers between the years of 1995 and 1999 in the UK. The outcomes of the study showed that the dangers of moving around the built environment (like shared pavements for cyclist and pedestrians), changes in the built environment, cluttered street cafes, designs necessitating more time (like pelican crossings), discontinuous nature of route ways, inability to get on a bus owing to poorly designed bus stops and cars parking illegally, inability to move from the sidewalk to the building main entrance, lack of tactile or sensory guidance, polished floor, absence of colour contrast and non-visual aids, and inappropriate colour schemes cause faulty interpretation of the space.

Scheer and Knoll (2003, pp: 224) touch on barriers standing on office areas, such as office parking in terms of location, condition, and topography of sidewalk and curb cuts; office entry in terms of whether there were lightweight and usable handles and/or automatic doors, low doorway thresholds; restrooms in terms of entry and use etc.

The importance of inaccessible public transport is discussed by Imrie (2000 (b), pp: 6) in terms of its role in limiting geographical boundaries for people not having any other access option. By limiting mobility of people with disabilities in cities, access to different places and onwards goods and services are also restricted or impeded completely.

2.2.4. Suitable Arrangements

The suitable arrangements can be derived from barriers as explained in detail above. All the limiting or inhibiting present barriers within the built environment have to be removed first in order to achieve accessibility. Then necessary additional and assistive equipment have to be installed and placed. For

the development areas, accessibility principles have to be considered in newly designed and constructed areas. Movement and mobility in open areas, if possible flush access, ramps and easy-to-open doors for all entrances, adequate signs, colour-contrast on doors and steps, sufficient lighting, adequate turning space in circulation areas and corridors, lifts, accessible toilets are notable arrangements for accessible spaces.

According to Freund (2001, pp: 691), 'material organisation' of daily life and the life spaces should be elaborated more. Architectural modifications should be supported by personal assistance and adaptive equipment. To illustrate, when a bathtub is examined, bathing assistance and a tub bench should also be planned as well as a roll-in shower as an architectural modification and barrier elimination (Stark, 2001, pp: 39-47).

The architectural arrangements important for people with disabilities to gain more mobility in space will be examined as the four areas of accessibility.

2.2.4.1. Open Spaces

For pedestrians, continuity of the paved surface has to be provided with ramps as an alternative to steps. Shop entrances on sidewalks, similarly, should be conceived as ramps instead of steps that are placed between the sidewalk and threshold levels (Ramsay, 1990, pp: 62). Ramps should have certain design features, such as gentle gradients to reduce the gravitational pull on wheelchairs and ensure control (Ramsay, 1990, pp: 62).

Curb cuts, which are frequently implemented in the design of ramps as an example of non-standard practice, are explained by Golledge and Stimson (1997, pp: 497) in terms of how they may be hazardous for visually impaired people. When they are cut gradually, blind users cannot sense this change. The solution for this problem can be tactile tile installation at the beginning of curb cuts or grooves to provide a change in surface texture indicating difference on the route for visually impaired people using a cane.

Adequate seating, lighting and protecting units like shelters should be added to barrier- free sidewalk features.

Blackman (et al., 2003, pp: 362) gives other arrangements which provide a safe living space for people with dementia. To illustrate, memory and personal safety aids with sensors that stop bath overflowing and gas cut-off switches can be given as examples. Outdoors, calm, familiar and welcoming arrangements help to

support emotional well-being and spatial orientation. Short corridors, direct routes without dead ends and sharp corners and frequent environmental cues are more feasible for people with dementia than repetitive elements, fixtures and fittings. There are some details in designing locational and directional information as simple, readable and contrast coloured, dark text on a light background. In addition, tactile way finding cues, good lighting and windows with plenty of daylight will facilitate people suffering from dementia (American Institute of Architects, 1985; Brawley, 1992; cited in Blackman et al., 2003, pp: 363, 365) and the visually impaired. Street widths creating visual hierarchy are given as an urban design criterion so wider streets can be understood as main routes and narrower ones as secondary routes (Gehl, 1996; cited in Blackman et al., 2003, pp: 365). Instead of poor maintenance, inadequate lighting, uneven surfaces, unsuitable level materials, complicated or mixed patterns, colours or materials, sidewalks should be plain, smooth, level, non-slip and non-reflective, all of which provide easy use for everyone (Blackman et al., 2003, pp: 365).

For the totally or partially blind, there are many solutions providing safer and easier movement in open areas in cities. Golledge and Stimson (1997, pp: 505) support this with design and implementation measures. The first one is about guide lines that can be used by visually impaired people in order to make sense of orientation and can be installed on different floor, sidewalk and ground surfaces. The second measure is related to the safety of users in walking areas including a guide line with necessary head openness freed from obstacles such as signs, sales carts, benches, rubbish bins, parked baby buggies or bicycles (parked cars, plants grown in inappropriate places, remains of old infrastructure work etc. are additional obstacles on sidewalks for pedestrians in Turkey). Announcements are another arrangement for visually impaired people, which should be provided at stations, in trains and buses in the form of routine and extraordinary cases. In this context, auditory information signals should be installed at traffic lights too.

2.2.4.2. Buildings

Stark (2001, pp: 40,44-45) gives a table as a summary of a survey carried out with people with sensory impairments, motor impairments and others who live at home. The parts of the table related to the thesis are presented below:

Table 4: Content analysis of barrier and enabler items

Environmental barrier	**Definition**	**Description of Barrier**	**Description of Solution to Barrier (Enabler)**
Change in level	Moving from one level plane to another. This can include stairs, ramps, or uneven surfaces	"steps to my basement"	"a ramp from my garage to my house"
…	…	…	…
Layout	The layout of the floor plan	"I can't manoeuvre in my bathroom because it is too small"	"My house is very small and I can get to everything without spending much energy"
Narrow spaces	Narrow spaces in which individuals pass through or Perform.	"I can't get in doorways because they are too narrow"	"I have removed all of the doors in my house"
…	…	…	…
Support for balance	A grab bar or object which supports or balances a person	"going up stairs, when I get half way up I have to take my right hand and walk to the left side"	"hand rail outside my garage door"
…	…	…	…
Surface coefficient of friction	The ground surface material	"Thick carpets are very hard to roll on"	"Removed all throw rugs" "thin carpet"
…	…	…	…
Hands free	Items that replace the use of hands during tasks	"can't turn on the tap (for water)"	"voice activated computer"

An example comes from Davies (1999, pp: 82-83) about a Museum adaptation for providing accessible facilities for all kinds of disabilities, which is also a planning and cultural activity. Some of the adaptations made in Swindon Railway Heritage Museum can be given as examples of suitable accessible arrangements with not only architectural but also technological solutions:

- Information is provided in many ways at the ticket desk, such as a counter loop for hearing impaired people, a talking price list and staff for assistance.
- Lift provides access to all floors of the building.
- Lift contractors are ready in case of break down.
- Lift has wide doors, manoeuvring space, and adequate length of opening times for wheelchairs.
- Revolving doors are not preferred.
- Handrails are placed in corridors and large exhibit rooms.
- Heights of written displays are suitable for wheelchair users.
- Because of length space need for suitable slope for ramps in indoor space, scissor lifts are used for level changes.
- All corridors and doorways are in compliance with standards.

The suitable accessible arrangements are implemented within buildings and near environment are also given by Golledge and Stimson (1997, pp: 496).

> …ensuring that elevator controls can be reached by those in wheelchairs; establishing signs at eye level for the wheelchair-bound person, lowering the height at which water foundations operated or window locks could be found; reducing the height of work surfaces within the home (e.g., in the kitchen) and in the office (e.g., computer workstations); providing lowered washbasins in public toilets and washrooms; providing wider doors; changing doorknobs to bar levers to facilitate opening; providing wider parking areas for disabled people; providing wheelchair ramps as an alternative to steps or stairs to enter buildings or to move between floors where elevators were not available.

Different needs in the built environment of visually impaired people and how a building implementation responds to these needs is illustrated by Golledge and Stimson (1997, pp: 505). Every change of direction should be marked, the acoustic and floor surface changes should be placed at intersections or decision points, and there is a need to make an addition that guides from tactile and contrast colour painted floors.

2.2.4.3. Information

Information facilities are used in daily life so often that we may not be aware of their importance. All traffic signs, labels, signboards and charts, even ways of finding tactile facilities in streets, building entrances, different units of a building, elevators, public buses, metros, and ticket offices guide people to use the

facility for that time. Whether information is in printed form or displayed on a screen, it is subject to certain criteria (ECMT, 1999, pp: 9-17).

The first criterion is **clarity**. Information should be legible and easily understood by everybody. Appropriate print size means that it is large enough to be read by partially sighted people, for example. Moreover, colour contrast is one of the main principles for an information facility where the background and foreground should be selected in contrasting colours. Braille print is necessary for blind people. The location of information, on the other hand, is also important and information facilities should be placed at eye level, if possible. In some cases, additional facilities are necessary, such as audible information for people with visual impairments and more visual information for people with hearing difficulties.

Conciseness is another feature in the design of information facilities. Time taken to use an information facility is important when a person is in traffic or using a public transport vehicle, therefore symbols can be used for accelerating the communication of information and enhancing perception and understanding.

Information should be presented **accurate**ly. As people with disabilities need to expend more effort in the built environment than other people, updating information is much more important for them. When a person with walking difficulty walks in a wrong direction owing to an old sign, they must use more time and energy to go back in the correct direction. Visually impaired or elderly people, on the other hand, may face several confusions in way finding or just moving around, which is a vital problem for them.

When appropriate information is only presented **timely**, it will provide necessary assistance. During a public transport journey, audible announcements supported by visual boards are especially useful to alert users when to get on or get off a vehicle. The location of an information facility that can be accessed in case of need, namely in time, should be thought of in this manner.

2.2.4.4. Public transportation

All public transport modes require accessibility features to provide disabled people with access solutions.

Buses, a mode of public transport system in the inner city, are as important as other fields of the built environment. The design principles that should be achieved in the public transport systems can be derived from an

implementation example from UK where not only disabled or elderly people, but also people with shopping bags, trolleys or heavy luggage, travel with small children or a pushchair had many difficulties in using public transport systems owing to their traditional designs in 1994 (Davies, 1999, pp: 84). For this reason, five routes in London were introduced to low-floor buses which have step-free doorways and powered ramps. To provide easy access, kerbs at bus stops have been raised. Some other refurbishment principles are given by Davies (1999, pp: 86) which are suggestions made by Swindon Access Group for London. The signage for seating of elderly and disabled people should be larger print; handrails should be extended on escalators, and time length of door opening should vary according to users with limited mobility in the underground system.

In addition to bus systems, rail systems should also be accessible. Vertical circulation is the first important accessibility feature for railway systems in order to afford access to a station. There may be long walking distances in stations, which create difficulties for people with walking impairment. Tactile facilities for way finding or warning systems should be installed in circulation areas. In these areas, necessary spaces should also be provided for the manoeuvre of wheelchairs and surface material should permit easy and safe mobility. Rail vehicles should be adapted for disabled people by adding a portative or mechanic ramp or lift, if absent. Circulation in the vehicle should also be considered and necessary provisions should be taken for safe travel. Information should be seamlessly provided from the point of entrance and throughout a station, the platform and in the vehicle.

2.3. Afterthoughts: towards Planning Enabling Environments

It can be derived from this chapter that disabled people are oppressed and excluded from their society in which spatial and social relations are created, experienced and perpetuated in a way that is only compatible for able-bodied people. People with disabilities live in such an environment that restricts and/or impedes them and causes conflicts, confusions and irritation. The reasons for this picture are discussed in this chapter of the thesis. It is argued that the enabling rather than the dis-abling should be emphasized.

Today, disability is a concept that societies pay more attention to. Indeed, the extent of present interests and emphasis arose from past experiences which were exclusionary, devaluing, segregationist, and depersonalising. Discussion and

realisation of a social or rights based model rather than a medical approach is in some degree an important step for all societies to make. One of the key actors has been the organisation of space.

Space cannot be discussed apart from its social dimensions since dominant social relations have designated space for disabled people as hostile, unfriendly, unavailable, a segregated world. This world established an environment which abounds with social, cultural and physical barriers for disabled persons. Such people have to cope with many obstacles to be equal or to experience life as able-bodied people.

The creation of able and dis-able results in a fatal dichotomy for disabled people in the society they live, since all of the negative experiences originate from the first term for the second one. How we can design environment in terms of eliminating this dichotomy in a society? A first step should be the refurbishment of space which impedes and/or restricts the mobility of people with disabilities, segregated places or architectural barriers that arise from the poorly designed built environment.

Efforts to improve the use of space face resistance and opposition that include ignorance of the concept of accessibility, costs, hardships and other difficulties. Faulty and unsuccessful implementations will also be experienced for a certain time in the built environment. However, with sufficient progress in the built environment, society will reorganise its activities directly or indirectly in relation to disabled people simultaneously. For example; if a child with a disability can go to school comfortably, his/her friends would have an opportunity to know and understand more about a disabled child than if they were segregated. If wheelchair users can use public spaces easily; people will recognise them and start to change their attitudes in time because they perceive them as a natural part of the society. Decision makers, professionals and practitioners working on built environment will know and change their perception of space. They will begin to think as if they were a disabled person and to consider if they could, for example, use a particular ramp independently and safely. Therefore, the gradient of such a ramp will likely decrease as practitioners' knowledge and consciousness increases.

However, this developmental process is not straightforward. Firstly, a society has to discuss who is a disabled person? Whether he/she is a dependent and sick person or is an able and normal citizen. When a social approach modifies its current direction towards the disability, disabled people have more opportunity

of freedom of choice, moving around and participating in the society like other people and will not be a handicapped individual any more. Then, society has to evaluate the accessibility and accessible design considerations as organs related to the built environment through local characteristics. The critical issue for accessibility is that it has to become part of the design process rather than remain an additional or adjusted solution, just as the entrance to any building is a natural necessity.

The transition described above has been experienced in some countries. The UK and Japan offer examples where disabled people have gained several rights in terms of not only their social relations but also their physical accessibility. The next chapter will discuss experience in these countries.

CHAPTER 3

RESEARCH ON EXPERIENCES OF TWO COUNTRIES

In this chapter, two important examples are investigated before Turkey; United Kingdom and Japan. These countries have started to discuss and work on disability issues before long time ago than Turkey; therefore their experiences are useful and include crucial points.

To reveal how they achieve more accessible life conditions for people with disabilities, their historical background are investigated. After several periods are evaluated in terms of development of disability politics, current disability legislation and institutional structure are examined, which there are two different constructions n selected countries. Accessibility legislation is the other title in this part that also includes some good accessible practices realised by countries. And at the end, after many issues inspected in the study, current participation level with some examples and critics is tried to reveal for each country.

In this framework, two different country examples, United Kingdom and Japan are tried to investigate briefly with the aim of revealing the period of their former and current situation about people with disabilities. First of all, a piece of information about disabled people population is given.

3.1. Case Study 1: Disability in a European Society; United Kingdom

3.1.1. People with Disabilities in the UK Today

1995 Disability Discrimination Act (DDA, 1995, pp: 1) describes a disabled person as;

> 'anyone with a physical or mental impairment, which has a substantial and long-term adverse effect upon their ability to carry out normal day-to-day activities'.

Although it is emphasised often in different sources that there is a uncertainty about the number of disabled people in Great Britain, according to the 2001 census results there are 10.8 million people (of all ages) in the UK who have a long-term health problem or disability, which limits their daily activities or the work they could do. They make up 18.5% of the UK population. Moreover, in a report of Disability Rights Commission (2004, pp: 2) there are currently around 10 million disabled people in Great Britain covered by the Disability Discrimination Act. This includes people with mobility, sensory and learning difficulties, and people with mental health and other health conditions.

There are some more demographic data about people with disabilities about socio-economic conditions; the disabled population had a much older age profile than the non-disabled population; 45 per cent of disabled people were over state pension age, compared with 15 per cent of non-disabled people. Almost three fifths of disabled people report three or more impairments. On the other hand, Employers Forum on Disability (2001) gives that most disabled people were not disabled at birth. About 77% of disabled people became disabled after the age of 16, i.e. once they were of working age.

In England, around 1.4 million children (16.9% of pupils) in schools are identified as having Special Educational Needs (SEN) (Scope, 2005, pp: 2). From 1997 to 2002 the total number of pupils in special schools fell, thus underlining the trend towards greater inclusion of disabled pupils. The number of children with SEN Statements rose with an increase of 11% in the last five years (DfES, Special Educational Needs in Schools in England, 2002; cited in Scope, 2003, pp: 2).

Scope, a civil organisation, gives that British disabled people account for almost 20% of the working age population (6.8 million) and yet almost half of all disabled people of working age do not have a job and one million disabled people who want to work and looking for work, made an average of two and a half times as many job applications as non-disabled people and yet got fewer job offers (Daone and Scott, 2003, cited in Scope 2003, pp: 3). 80.7% of non-disabled people are in employment compared with 48.9% of disabled people (Labour Market Trends, 2003; cited in Scope 2003, pp: 3).

The majority of disabled and non-disabled people were homeowners (either outright or with a mortgage) in Britain, but disabled people were more likely to be living in social housing than non-disabled people (The Department for Work and Pensions; cited in Grewal and others, 200; pp: 1).

3.1.2. Legislation and Institutional Structure Related to People with Disabilities

3.1.2.1. Historical Background of Disability Politics in United Kingdom

Disability issues in United Kingdom have become the current subject as discussed in society and governmental agencies, which origins of the society's attitudes towards disability and disabled people. It is possible that the process of development of disabled people's acquired civil rights of being equal persons like other members of the society can be examined in four periods.

First period can be called as institutionalisation and segregation times lays down in religion in Britain like other European countries. According to Barnes (1991) disability was seen as difference and oddness, and even associated with evil and witchcraft in Medieval Europe. People with disabilities were cared with religious charity and live within institutions isolated from society until 17th. Throughout the 18th and 19th centuries, it can be observed that severely disabled people closed into institutional as a segregationist approach like other disadvantaged groups. In the period of Industrial Revolution, new difficulties appeared for disabled people. This segregationist policy continued until 19th century when non-segregationist policy was started to discuss and implemented (Barnes, 1991).

Second period can be identified with medical approach toward disability. Barnes (1991, pp; 11-20) gives that in the mid-1800's, the medical profession's domination of all aspects of disability started. The most important of this period may be the foundation of first disability organisations as charities that are developed as influential disability groups later. Along with time, imprison of disabled people was perpetuated increasingly towards the end of the 19th century and did not begin to fall until 1950s. In this period, the foundation of National Association for the Care and Control of the Feeble-minded is reported by Barnes (1991, pp: 11-20) as a pressure group for the lifetime segregation of disabled people with other Eugenic ideals of following two decades.

Third period comprises 1940s welfare state epoch that is asserted by Barnes (1991, pp: 21-22) as paternalistic approach term. Disabled Persons (Employment) Act of 1944 appears as the first act especially for people with disabilities in the UK. The Act tried to provide employment for disabled people. Imrie (1996, pp: 55) asserts the 1948 National Assistance Act which charged local authorities with the duty of residential services and facilities and critics as an

philosophy of assimilation by supporting integration along with providing ‘cure’ for people with disabilities.

Moreover, some new attempts were developed against segregationist implementations and community-based services were expanded since the late 1950s. After many social and politic attitudes discriminating, excluding and isolating from society, some positive effects of this implementations come to mean for majority of disabled people that have more access to more services and more integration into community. Nevertheless, this was not enough for disabled people who want to control their life themselves (Barnes, 1991, pp: 21-22), which informs us of experiences of the next period.

In 1960’, disabled people started to discuss the democratic society with other minority groups of the societies all around the world. This period is analysed by Barnes (1991, pp: 208) again that a democratic society must carry the right of the participation of everybody in political process. However, there were many barriers standing on this right for people with disabilities. This is not surprising that historical background summarised above has resulted negative attitudes and these have affected the policy-makers and practitioners hitherto. Some illustrations come from Barnes, as; disabled people’s social responsibility has been set up on the assumption of inability traditionally, they do not appear on the electoral register. Physical barriers, on the other hand, are other difficulties in this respect certainly. The other problems, which were the main origin issues of social struggles, were related to inaccessibility of political information that causes lack of information increasingly being regarded as a major barrier for citizenship.

Oliver (1990, pp: 114), on the other hand, concludes that ‘*disabled people’s ability to participate within the current party system and get disability-related issues on the political agenda are restricted’*. Thus, as a new case, new *single-issue pressure groups,* disabled people began to come together in order to remove the barriers and improve the quality of their own lives. In the mid-1970s, disabled people themselves have accelerated the activities of organizations and struggled to secure equal right and eliminate discrimination.

In this period, Chronically Sick and Disabled Persons Act of 1970 included access provisions for public buildings *‘as far as its practical and reasonable’* (Davies, 1999, pp: 77). The Act elaborated disability in point of view individual pathologies (Imrie, 1996, pp: 52) again.

The last period can be called as the process of enactment of new legislative arrangements. In 1979, the Committee on Restrictions against Disabled People (CORAD), one of the major organisations in the UK, was set up after pressure from disabled people and disability organisations. Discrimination in their everyday life and how this could be tackled have been started to discuss. The campaigns of 'equal status for disabled people' and 'collectivistic awareness' have been carried on with '*independent living"* slogan in the 1980s (Oliver, 1996, pp: 155) as the main topic of disability issues. '*Self-help/populist*' groups have been created in the context of the disability movement and political participation has been put in agenda (Barnes, 1991, pp: 222). The movement is emphasised by Leach (1996, pp: 88) with its features of 'social model' and discrediting 'medical model'.

In 1981, British Council of Disabled People (BCODP) was established in order to work on disability issues including re-definition of the disability problem and support independent living campaigns. BCODP is reported as a successful organisation at adopting disability identity. Because collective self-confidence and political identity have developed, disabled people have focused on the issue of institutional discrimination and anti-discrimination legislation in order to solve the problems (Oliver, 1996, pp: 155) and to secure disabled people's rights (Barnes et al., 1999, pp: 162).

Four years later, in 1985, the campaign against discrimination intensified and the Voluntary Organizations for Anti-discrimination Legislation Committee was set up (Barnes et al., 1999, pp: 162), later become 'Rights Now!', as collaboration of new and traditional organizations. Yet, there was not a notable development in the part of the British Government which has not still handled the discrimination as a problem. Oliver (1990, pp: 116) illustrates that disabled people planned more cautious tactics. Such as, many demonstrations and civil disobedience campaigns against implementations of inaccessible transport and environment, exploitation of television companies and charities, poverty resulted from impairment. One more example was the opposition protest to the Social Security Act of 1986 by taking the streets in London and other big cities in 1988.

By the mid-1990s, the force of the campaign has been accepted and the Civil Rights (Disabled Persons) Bill was introduced to Parliament for three times, but it was defeated. After some other discussions, in 1995, Disability Discrimination Act, as Government's own legislative proposals, was enacted.

Barnes and others (1999, pp: 163) declare that disabled people, however, criticised the Act with the suggestion of its *individualistic* and *medical* views. Besides, they asserted that there are insufficient protection through direct discrimination in employment and provision of goods and services. In addition, not all disabled people are covered by the Act and service-providers are exempt if they can show that compliance would damage their business. In 1997, to assess the 1995 Act, the Government established a Disability Task Force including both organizations *for* and *of* disabled people. The act reopened internal divisions and caused to end of the coalition between two type organizations.

3.1.2.2. Current Legislation Related to People with Disabilities in the UK

There are three main Acts about people with disabilities in the UK today. The Disability Discrimination Act (DDA) dated 1995 and with some differences The Disability Discrimination Act 2005, Disability Rights Commission Act dated 1999 and Special Educational Needs and Disability Act dated 2001.

According to Disability Rights Commission (DRC) (Bulletin 2005, pp: 1) The DDA 1995 was a huge leap forward in civil rights for disabled people and very few other countries have legislation that is comparable with the DDA.

The Disability Discrimination Act 1995 was passed in 1995 to introduce new measures aimed at ending discrimination against disabled people. It currently provides rights and duties in:

- employment
- using goods, facilities and services
- the management, buying or renting of land or property
- education.

The Act imposes obligations on employers, those providing goods and services to the public, and those selling, letting, or managing premises (DDA, 1995).

The Act is also being in force in Northern Ireland.

The DDA of 1995 contains four main sections. Part I of the Act provides a definition of disability and sets out who is covered by the legislation (Scope, 2003, pp: 4). Definition of the Act is based on *one's ability to carry out normal day-to-day activities*.

Part II is about employment and declares that it is unlawful for an employer to discriminate against a disabled person, as direct discrimination,

disability-related discrimination or failure to make reasonable adjustments. This section contains discrimination by employers, enforcement etc, and discrimination by other persons, premises occupied under leases, occupational pension schemes and insurance services (DDA, 1995).

Part III is related to discrimination in other areas like goods, facilities and services, and premises. This section of the Law describes that it is unlawful for a provider of services to discriminate against a disabled person and gives enforcement ways. Some additions and changes have been made in this section. For example service providers and those responsible for selling, letting or managing premises have to service, provide a good standard of service and to offer a service on good terms to disabled people since 1996 (Scope, 2003, pp: 4). Moreover, since 1999, many other provisions came into force and service providers have to make reasonable steps for enabling people with disabilities to access the service, to use of a service and to provide service by a reasonable alternative method (Scope, 2003, pp: 4).

A New Code of Practice published in 2001, a revised Code, deals with the duties placed by the DDA on those providing goods, facilities or services to the public and those selling, letting or managing premises. The Regulations include provisions in respect of physical characteristics of buildings, which meet the requirements of Part M of the Building Regulations, and in respect of service providers who need permission before they can make physical changes to premises - for example, from their landlord (www.disability.gov.uk). Nevertheless, Part M is compulsory for new shops, offices, factories and schools only for entrances (Barnes et al., 1999, pp: 118).

After this process, from 2004, businesses and other service providers to the public is the subject to improve physical conditions. They have to arrange physical feature(s) of the premises which include difficulties for disabled people to use a service or provide a reasonable means of avoiding it (Scope, 2003, pp: 4).

Part IV is on education of disabled people and their further and higher education. New rights and duties came into force in September 2002 under Part 4 of the DDA, amended by the Special Educational Needs and Disability Act (SENDA) 2001. According to the amendment, schools, colleges, universities, and providers of adult education and youth services are required to ensure that they do not discriminate against disabled people (DRC, 2005, pp: 2).

Apart from adapting the curriculum, electronic or other materials, providing additional services like sign language, interpreters or materials in Braille, training staff to work with disabled people and to provide appropriate adjustments, this part covers all aspects of the physical environment too. Access to buildings, such as level or ramped entry, emergency evacuation arrangements, such as flashing light fire alarms or vibrating pagers for deaf people, fire refuges or alternative escape routes for people with mobility impairments, the accessibility of external paths and landscaping, circulation within buildings, including their interior layout, effective lighting and signage and colour or tone contrast on doors etc to aid orientation, acoustics appropriate for hearing aid users and loop systems in lecture theatres or reception desks are some important details under this section of the Act (DDA, 1995).

Helpful equipment wherever needed -reasonable adjustments- provision was a duty since September 2003. Moreover, making adjustment of premises of education providers was a duty from September 2005 (DRC, 2005, pp: 2).

Part V is about public transport as means of taxis, public service vehicles and rail vehicles. This part aims to secure accessibility of disabled people in using different public transport vehicles and gives some more details related to false statements as supplemental other issues (DDA, 1995).

DRC declares that because the DDA was weaker when it was enacted, it is tried to strengthen through changes in Parliament and judgments in particular cases (DRC, 2005).

Disability Rights Commission Act dated 1999, designates characteristics and duties of the Commission is the other Act related to people with disabilities in UK. Because the Commission is one of the main bodies working on people with disabilities, the Act and the Commission will be investigated in more detail next part of the study.

While DDA 1995 has introduced new provisions and obligation to several social parts of the society, it is observed that the second DDA in 2005 extended and strengthened some duties with further major provisions after 2006. The Disability Discrimination Act 2005 placed a new disability equality duty on all public sector authorities from December 2006. It is declared as

> … a part of a new type of equalities legislation that aims to ensure that public bodies build disability equality into the way in which they carry out

> their business - tackling institutional discrimination before it can impact on individuals.
>
> This new legislation means that public sector bodies will have a duty to promote disability equality in all aspects of their work. From the police to health services, schools, local authorities, NHS trusts, central government, the entire public sector will have a duty to promote the equalisation of opportunities for disabled people (DRC, 2005, pp:2).

The definition of disability, transportation and some new public functions were included by the 2005 Act too. The definition extent of disability changed and the Act include people with HIV, cancer and MS. As transport was not covered by DDA 1995, this new amendment provides provisions for more accessible vehicles. In addition, DDA 2005 also include accessibility for larger private clubs and housing (DDA, 2005).

The last Act, 2001Special Educational Needs and Disability Act force all education providers to make necessary provisions against discrimination of disabled pupils (Scope, 2003, pp:2)

3.1.2.3. Institutional Structure Related to People with Disabilities

It can be derived from former part that the 1995 Disability Discrimination Act marked an important step forward in disabled people's rights. However, disabled people living in UK have thought that there are not comprehensive and enforceable civil rights still, because of gaps and weaknesses in the Act. According to Disability Rights Task Force (www.disability.gov.uk), the legislation cannot change attitudes and culture alone.

Disability Rights Task Force, dated 1997, has aimed to work on disability issues including affecting disabled people's lives and an advisor for the Government. The basic reason was to achieve comprehensive and enforceable civil rights for disabled people within the context of society.

The Task Force (www.disability.gov.uk) has been a bridge between disabled people faced many discriminatory implementations and the State through policies, legislative and guidance tools, and recommendations. It was aimed to provide a platform for disabled people and they can find the chance of several rights and opportunities to full and equal citizenship.

Since there was a crucial need for an enforcement body ensuring fulfilment of legislation about disabled people, the Task Force reported to establish a governmental body as Disability Rights Commission.

Scope (2003, pp: 5) gives some information about The Disability Rights Commission that it is an independent body and has served for equal opportunities for people with disabilities since the year of 2000. To eliminate discrimination against disabled people, it has carried on a number of activities such as formal investigations, researches and preparing advises to the Government about DDA and current legislation. Giving advice and information to disabled people, employers and service providers (Scope, 2003, pp: 4) and working to achieve a society in which all disabled people can participate fully as equal citizens are included in the other duties of the Commission.

Disability Rights Commission Act dated 1999 describes the situation and structure of the Commission. According to the Act the Commission shall have the following duties

a) to work towards the elimination of discrimination against disabled persons;

b) to promote the equalisation of opportunities for disabled persons;

c) to take such steps as it considers appropriate with a view to encouraging good practice in the treatment of disabled persons; and

d) to keep under review the working of the Disability Discrimination Act 1995 (DRC Act, 1999).

The Commission accepts that if communities are to be truly sustainable they must be inclusive. In this respect definition of its obligation area is given as;

> …to be truly sustainable, communities must be planned, designed, managed and maintained to enable everyone to live, work, learn and participate in the activities they choose without being confronted by barriers that prevent them from doing so. It should be striving to achieve this through mainstream provision and an ever-decreasing reliance on special services. To perpetuate a culture of general and special needs provision not only segregates those excluded from the mainstream, it is also potentially unsustainable financially as it costs more, making it more likely that where cuts are needed the service will be withdrawn (DRC, 2004).

One more institutional working is about Disability Equality Duty Codes of Practice is about new duties of public sector. According to the DDA 2005, all public bodies including a range from local councils to government departments, from universities to hospitals are responsible for equality and promoting disability equality and have to become a proactive agent of this change (DRC, 2005, www.drc-gb.org).

There are also some other duties sets out under the task of the Act. The General Duty is about elimination unlawful discrimination, harassment of disabled people and promotion equal opportunities, positive attitudes and participation to public life for disabled people (DRC, www.drc-gb.org).

With the Regulations, on the other hand, a Specific Duty and Disability Equality Scheme are given to key public bodies. The first one is prepared as connected with the General Duty a Disability Equality Scheme is produced within the frame of it (DRC, www.drc-gb.org).

The Disabled Persons Transport Advisory Committee (DPTAC) is one of other body of institutional structure and it strives for accessibility of disabled people. It was established by an Act of Parliament as an independent body to advise Government on the transport and the built environment needs of all disabled people all around the UK (DPTAC, www.dptac.gov.uk).

DPTAC's works with the aim of removing barriers and serve as an accessible transportation. DPTAC accepted that barriers exclude disabled people from full participation in society; they are made up of transport, built environments and society's negative attitudes, rather than impairments itself. In this respect, the Committee carries out the promotion of an accessible transport system and inclusive built environment in the advice given to Government (DPTAC, www.dptac.gov.uk).

3.1.3. Legislation and Practices Related to Accessibility

In UK, it is the legislative and formal view that if housing, employment and commercial centres can easily be accessed by everyone, including disabled people, the economy will enhance. Accessibility and welfare is seen as parallel provisions and with accessible public transport and built environment, disabled people can reach employment services, find opportunities to work and then can increase their income (DRC, 2004, pp: 3). In this respect, there are many legislative arrangements as regulations, code of practices etc. enacted after DDA in the UK.

Imrie (1996, pp: 100) explains that there is not a compulsory mechanism for disability access for buildings in 1980s. Since 1985, accessibility is a criterion for buildings which regulations in England and Wales have required that reasonable provision is made in the design and construction of buildings for disabled persons to gain access. Any new buildings and some extensions will be

subject to *Part M of the 1991 Building Regulations* which is the main mechanism in accessibility practices for local authorities.

> In addition, local authorities often use a range of informal, non-statutory and/or voluntary mechanism, to try and persuade developers to sensitise buildings to disabled people's needs. Their use will often depend on local political support, and officers' willingness to step beyond the boundaries of statutory regulations and guidelines (Imrie, 2000 (b), pp: 9).

This interpretation can be proven with results of a survey conducted by Imrie (2000 (b), pp: 10) and applied on local authorities between the period of February 1996 and January 1997, in other words after the DDA 1995 enacted, in the UK. The survey aims to find out local methods for access policies and practices. The survey reveals that there are geographical variations which in urban areas access policies are more developed than rural ones. It can be also derived that case areas where local voices of disabled people are high have developed policy documentation and initiatives more than other areas.

Under the Regulations, *'reasonably safe and convenient'* access for disabled persons is obligatory provisions for the physical features of a building in order to gain access and use the building. The Regulations as amended in 1992 and 1999 are applied to new buildings and ground floor extensions to existing buildings, *but not to the existing buildings themselves*.

Part III of the Disability Discrimination Act 1995 gives disabled people a 'right of access' to goods, services and facilities, as mentioned in the last part. It is based on the principle that disabled people should not be discriminated against by service providers or those involved in the disposal or management of premises. The Disability Rights Commission has produced a Code of Practice for service providers to help them understand their obligations and a guide for disabled people outlining the new rights (DRC, 2004(b)).

The 1995 Act is criticised by Davies (1999, pp: 77) that access standards are obligatory for new buildings, not for existing ones. Moreover, there are little provisions considering built environment in the Act, apart from provisions for service providers', mentioned above.

The Part III duties have been introduced in three stages:

> Since December 1996 it has been unlawful for service providers to treat disabled people less favourably for a reason related to their disability;

> Since October 1999 service providers have had to make "reasonable adjustments" for disabled people, such as providing extra help or making changes to the way they provide their services; and
> Since October 2004**,** service providers have had to make other "reasonable adjustments" in relation to the physical features of their premises to overcome physical barriers to access (DRC, 2005, pp:2).

There are several codes of practice under the regulations, which gives detail information about disability, the Act and what have to be done according to the Act.

In UK transport of people with disability is arranged by the Transport Act 1985 and according to this Act the Disabled Persons Transport Advisory Committee (DPTAC) is a statutory body set up under to advise the Government on transport policy as it affects the mobility of disabled people. Related part of the Transport Act provides that it is reasonably practicable, secure that at all times at least half of the membership of the Committee consists of persons who are disabled. In addition, it Committee is given the duty of consideration the needs of disabled persons in as passenger in public transport and preparation such advices to the Secretary of State (DPTAC, 2005, pp: 3). According to the regulations, the drivers of regulated buses have to provide '*reasonable assistance*' to disabled people. On the other hand, while new buses in service after 2000, carrying of guide and other assistance dogs are free of charge in all licensed taxis and private hire vehicles (minicabs) (DPTAC, 2005, pp: 4).

DDA 2005 brings new rights in use of public transportation system and gives a deadline for making provision of accessibility in all railway vehicles.

In the meantime, DRC introduced '*inclusive environments*' term in 2004. This term is explained by the Commission with dimensions of attitudes of individuals and society;

> .. the planning, design and management of services; transport; communications; and buildings and spaces. Inclusive environments accommodate and provide solutions that enable all citizens to participate in mainstream activities equally, independently, with choice and with dignity (DRC, 2004, pp: 2).

DRC also gives more information about planning system which revised in terms of new regional planning structures and sustainable development concept. Social inclusion is one of the two strategic objectives; the other is sustainable economic development. Removing physical and social barriers provide integration

of people with disabilities by the way of accessing housing, employment, services and education.

Therefore, accessible and affordable *housing* is an important part of this inclusion process. With the population age increases, accessible need becomes more considerable issue in the UK. Barnes and others (1999, pp: 119-120) assert that the accessible building stock has changed according to housing politics and there is a little encourage for house builders to build accessible standards.

There have been several organisations working on accessible implementations all around the UK. Swindon Borough Council, Access Action Group, Advisory Group, City of London Access Group and Bristol City Council are a few examples of these organisations which given by Davies (1999, pp: 79-87). They have conducted many studies and activities with local authorities and other bodies in order to achieve accessible arrangement in different fields of built environment.

After all of the issues and discussion carried on above, it may be useful to place a comparative assessment prepared by Golledge and Stimson (1997, pp: 492-496). Environmental design ideology of UK is evaluated as '*social welfare cultural values of compensation, special treatment, and pragmatism',* while United States' ideology is given as *self-help* consideration including *enablement, equal treatment and idealism*.

3.1.4. An Assessment of Participation of People with Disabilities to Public Life

One of Scope's report named *'Disabled in Britain: A World Apart'* presented by Lamb and Layzell (cited in Scope, 2003, pp: 3) is dated 1994 gives us an opportunity of comparison before and after situation of the DDA enacted in UK. Scope as a disability organisation whose focus is people with cerebral palsy criticises the 1990s community of UK by saying that disabled people are subject to discrimination and difficulties in different fields of their lives. Even shopping, going to the cinema or to the pub which they are everyday activities for other people might create the most difficulties for disabled people. In the same report, the mentioned term witnessed many discriminatory examples in education and employment.

Some economic information given by Imrie (1996, pp: 3) that a survey shows that 25% of disabled people are unemployed twice as much than average (Dalley, 1991; cited in Imrie, 1996, pp: 3).

The other conclusion derived from the Scope's report (Scope, 1994) is about one in three disabled people complain about public places such as cinema, restaurant, pub/club, theatre, sporting event or leisure centre where they are refused to being served. One more report named '*Left Out'* prepared by Stewart (1996; cited in Scope, 2003, pp: 3) includes that there are one or more entry problems for people with disabilities at the range of three-quarters of the businesses.

Inaccessible polling stations were one of the basic struggle issues of disability right movements in accordance with their restriction for exercise the right to vote on equal terms with non-disabled people of disabled people's. The Scope (2003, pp: 1) suggests that there are many obstacles at the polling stations still.

In a survey conducted by The Leonard Cheshire Foundation in 1998 (Knight, and Brent, 1998; cited in Scope, 2003, pp: 1) under the title of *'Access Denied: Disabled People's Experience of Social Exclusion'* gives some evidences of lack of awareness and fear of the unknown is compounded by the predominantly negative media images of disabled people and of disability generally. People respond that wheelchair-users were "less intelligent" as the rate of nearly one-third; and 44% of opinion leaders thought that using a wheelchair would present a major obstacle to gaining employment.

Blackman et al. (2003, pp: 358) declares that although UK Government green Paper dated 2001 tackles '*barrier-free urban environment as a mainstream concern for planning policy and practice'*, there are problems with the scope, effectiveness and enforcement of the measures.

According to the survey carried out by the Royal National Institute for the Blind among visually impaired adults, 80% of them have been out, in other words, away from their homes in the previous week (Bruce et al., 1991; cited in Butler and Bowlby, 1997, pp: 427). Imrie (2000 (a), pp: 1641) adds that building entrances and using and transport limit wheelchair users; for example most of (80%) underground stations in London are inaccessible for wheelchair users. The general rate of experiencing difficulties in transportation is given by DPTAC (1989, pp: 1; cited in Barnes et al., 1999, pp: 120) as between 10-12%.

There are many research projects about architecture, access and built environment and experiences of 75 people with disabilities in the UK between the years of 1995-1999. They are important because they were conducted after DDA was enacted. Imrie's (2000 (a), pp: 1645-1649) groups about the answers are given in the former chapter. Since their importance in relation to legislative arrangements, it is repeated in this part of the study; dangers of moving around the built environment, changes in the built environment, cluttered street cafes, designs necessitate more time, discontinuous nature of route ways, inability to get entrance of bus owing to poorly designed bus stops and cars parking illegally, inability to move from the sidewalk to the building main entrance, lack of tactile or sensory guidance, polished floor, absence of colour contrast and non-visual aids, and inappropriate colour schemes causing faulty in interpretation the space. Furthermore, a number of social and cultural barriers are given by respondents as feeling unwelcome in public places, hostility of other people and verbal and physical abuse etc.

In the housing realm, difficulties faced by disabled people are the same to the other fields. Barnes and others (1999, pp: 119-120) reveals that homelessness of disabled people has increased between 1980 and 1988 at the rate of 92% and the rate of disabled people live in property owned by local authorities is twice as much than non-disabled people. Two specific reasons are exposed by the authors; first is about disabled people's economic situation as low income groups, and second is about accessible housing provided by local authorities with a legislative duty rather than private sector. Davies (1999, pp: 84) suggests that there were many difficulties in travelling by bus for disabled people living in the UK.

3.2. Case Study 2: Disability Experiences in Japan

3.2.1. People with Disabilities in Japan Today

In Japan, disability is categorised in three types as physical disabilities including hearing, speech, visual and orthopaedic impairment, intellectual disabilities and mental disorders according to Disabled Persons' Fundamental Law (dated 1970 and revised in 1993), which has some difference than other countries. Disabled persons are defined in the Law as;

> …persons whose daily life or life in society is substantially limited over a long term due to a physical disability, mental retardation or mental disability (JSRD (b), 1997, pp: 2).

Like other countries, according to several sources, enough and acceptable demographic data are not available in Japan and the number of disabled people is not definite. Data supported by Ministry of Health and Welfare gives that there are 2.6 million physically disabled people in Japan in 1987 and 385,100 mentally retarded persons in 1990 (Toshihiko, 2005). On the other hand, Annual Report on Government Measures for Persons with Disabilities (Japan Cabinet Office, 2005, pp: 1) gives that there are about 3.516 million persons with physical disabilities (2.8% of total population), about 459.000 persons with intellectual disabilities (0.4% of total population) and 2.584 million persons with mental disorders (2.1% of total population) as based on the 2000 Population Census. In this data, about 5% of the total population has some kinds of disabilities.

When data is compared from 1970 to 2001, the rate of visually and hearing/speech impaired people remain almost unchanged, but other physically disabled (as mentioned mobility disabilities) and having organ disability (statement from the Report) number increases. In mental disorders, on the other hand, schizophrenia remains almost unchanged and depressive disorder increases.

However, that proportion is rather low in terms of estimated number. One reason given by Toshihiko (2005) is that laws limit types of disabilities and exclude several ones. Kose (2003, pp: 309) reports that the proportion of people aged 65 and over is more than 18% of population.

It can be useful to mention that because of Annual Report's data based on 2000 Census, Ministry of Health and Welfare's information newer and different. Ministry gives information from survey conducted every five years that because population has been becoming older, number of people having motor impairment and illnesses has been increased. Intellectually disabled people constitute 0.3% of total population. Mentally disabled people like schizophrenia, psychotic and personal disorders, on the other hand, comprise 1.39% of the population (Terashima, 2004).

3.2.2. Legislation and Institutional Structure Related to People with Disabilities

3.2.2.1. Historical Background of Disability Politics in Japan

Disability politics and practices have been attained a definite level in today's Japan. In this attainment period, two important factors have extremely considerable role; United nations' Asian and Pacific Decade of Disabled Persons and social movements carried on by disabled people's themselves.

Hayashi and Okuhira (2001, pp; 856) mention like other authors that while traditional dominant approach was care supported by relatives for disabled people, first legislative arrangement about disabled people in Japan is Social Relief Regulation, which aimed to provide rice for poor, elderly, young, sick or disabled, enacted in 1874. In First World War years, dependency of disabled people to parents and sibling continued. In welfare period, the Law for the Welfare of People with Physical Disabilities aimed to solve the problems of veterans and physically disabled people (Kodama, 1997, pp: 2) and introduced occupational rehabilitation only for veterans was enacted in 1949. That was the first national disability policy Act (Hayashi and Okuhira, 2001, pp; 856).

In Japanese Society for Rehabilitation of Disabled Persons' report, foundation of main organisations is elaborated. Japan Federation of the Blind established in 1948 and All Japan Federation of the Deaf formed in 1949 aimed to demand the amendment of discrimination article in the civil law. In the same years, the Japanese Association for the Protection of the Mentally Retarded was re-founded in 1949 and Japanese Parents Association for the Mentally Retarded was established in 1952 (JSRD (a), 1997).

The National Pension included the Welfare Pension for People with Disabilities were started in 1961; however, the amount of the pension was determined according to family income and impairment degree. Adult disabled people were excepted from the pension because they were still accepted as supported by family or other relatives, which resulted in institutionalisation and social segregation and exclusion like other countries (Hayashi & Okuhira, 2001, pp; 856). In the same year, the Physically Handicapped Persons Employment Promotion Law and the Law for the Welfare of the Mentally Retarded were enacted (JSRD (a), 1997).

Hayashi and Okuhira (2001, pp: 857-859) explains that because Japanese social norms and policies were constituted through caring by parents,

relatives demanded for residential institutions for their disabled children in 1960s. It can be derived that those social demands were responded by Japan community and many residential institutions were built. After World War II, economic recovery and social response under the welfare demands, even occupational rehabilitation services were changed into residential facilities for disabled persons (Tateiwa, 1990; cited in Hayashi and Okuhira, 2001, pp: 857). Hayashi and Okuhira (2001, pp: 857) also summarise this period as *'from home confinement to institutional segregation'* and state that disabled people, as adults or child, were confined, their life conditions were often harsh, and human rights were undervalued by different forms of abuse.

Whilst the social movements have waved all around the world, Japan also witnessed disability protests in 1960s and 1970s. As strong as anti-Vietnam war, students, environmental and feminist movement, disabled people began to raise their voices against discriminatory treatment like residential institutions and segregated schools. A group was established by educated cerebral palsy members and for the first time the government participated a meeting held by disabled people and faced with demands come from the group in 1961. The group grew with time. In 1967, the Japanese Association on Disability and Handicap was established in order to develop human rights of disabled people in theory and practice and assure their full human development (Toshihiko, 2005). After a group of people with disabilities staying one of the residential institutions tried to gain better treatment through a hunger strike in 1970 concluded no policy changes, more than one-year sit-ins protest was echoed. The government was forced to consider conditions of institutions and disabled people started to think about their independent living alternatives (Hayashi and Okuhira, 2001, pp: 860).

The social milieu were criticised by disabled groups especially one with cerebral palsy by discussing ableist society, which defines disabled people as 'an existence which should not exist'. After a coalition of disability right organisation was established in 1976, demonstrations were increased against inaccessibility, segregated education and many legislative arrangements.

In 1980, the Japan Council for International Year of Disabled Persons, which coordinates full participation and equality activities in Japan and abroad, was formed (JSRD (a), 1997). The period of 1983-1992 witnessed government and disability organisations' '*Full Participation and Equality*' works. This continued

through “Asian and Pacific Decade of Disabled Persons” in 1993-2002, which important goals are reported to be achieved with important legal provisions.

> … the Japanese government included the “revision of laws and provisions which hinder the social participation of PWDS [people with disabilities]” as a major political issue in its “New Long-term Programme for Government Measures for Persons With Disabilities” (Takada, 2003, pp: 1).

Hayashi and Okuhira (2001, pp: 863-864) gives the period of 1970s that this term brought some limited liberty to Japan disabled people who left institutions or parents’ home. Next decade was negotiation period with regional governments in order to be supported for daily needs. Independent living started to become new life alternative, and after long negotiation with local authority, the first Personal Attendant Program for Physically Disabled Persons was started. The first centre for independent living modelled after USA was set up in 1986.

The association for coordination of independent living movement, the Japan Council on Independent Living Centres including peer counselling, a personal attendant’s programme, a housing service and an independent living programme and of which managers are only disabled person was set up in 1991. Afterwards, more developments were experienced for instance; in 1996 City-Town-Village Living Support Program for Disabled Persons and in 2000 a Home Helper Program for Disabled Persons was formed (Hayashi and Okuhira, 2001, pp: 867).

3.2.2.2. Current Legislation Related to People with Disabilities

In Japan, disability is integrated in about 120 laws and many regulations, local laws and regulations. Besides, laws about disabled people are categorised in terms of their daily life. Takada (2003, pp:2) gives that some laws were revised in response to Asian and Pacific Decade, which government reported that there were 79 laws and regulations limited the qualification, movement, access and participation.

Firstly, there are six articles, which are related to fundamental human rights, prohibition of abuse of freedoms and rights, respect of individuals, rights of minimum standard life, rights and obligations of education and rights and obligation of labour in the Constitution of Japan (Japanese Society for Rehabilitation of Disabled Persons (JSRD), 1997 (b), p: 1).

The Disabled Persons' Fundamental Law that is dated 1970 and revised in 1993 enforces the fundamental principles of promotional measures for disabled people, like improvement basic human rights, increase disabled people's participation level in society and policy making process (Toshihiko, pp: 1) and determines responsibilities of the State and people with 29 articles.

The revision of the Law is criticised because although mental disorders are included firstly, many impairments like epilepsy, autism or many types of chronic illnesses are not comprised by the Law (Toshihiko, pp: 1). Besides, Takada (2003 pp: 1) adds one more matter that the Law is lack of obligatory legal force and regulations resulted in having little practical effect.

Japanese Society for Rehabilitation of Disabled Persons' (1997 (b)) report includes that there are more five main legislative arrangements related to support for independence and participation in society, personal care, pensions, allowance, tax deduction, accessibility etc. of people with disabilities; The first is The Law for the Welfare of Physically Disabled Persons dated 1949 includes some grants, provisions for home services, technical aids, work opportunities, place for living and participation services such as sign language interpreter, Braille translation etc. Second Laws is the Law for the Welfare of Mentally Retarded Persons dated 1960, which has similar content to previous law. Third law in this context is the Child Welfare Law dated 1947 protecting the human rights of all children and aims at their healthy upbringing. Next is Law for Promotion of Research, Development and Distribution of Technical Aids and Equipments dated 1993 and aimed to help everyday life and social life of disabled persons and elderly. Last one is Social Welfare Services Law dated 1951.

There are also several laws in Japan: two are about health and medical care issues, one of which is the Law concerning Mental Health and Welfare for Mentally Disabled Persons dated 1950 interest in especially establishment various centres, two are education matter that important one is School Education Law dated 1947 providing education for disabled children and four are employment issues one important is the Law for Employment Promotion, etc. of the Disabled Persons dated 1960 regulating quota, levy and grant systems.

Each law gives different disability definitions in terms of Law's interest. Conspicuous matters are that Japanese Laws are built according to types of disabilities and age of disabled people. For instance; while the Child Welfare Law is about children (not only disabled ones but all of) under the age of 18, The Law

for the Welfare of Physically Disabled Persons considers over 18 years old disabled people (Terashima, 2004, pp: 1-2).

In addition to those laws, there are several income security and tax system laws aiming to provide better life standards for people with disabilities (JSRD, 1997 (b), p: 10-11).

The other main document played important role in development of disability politics is The Government Action Plan-Seven Year Normalization Strategy of 1995 under the title of *'Towards a Society for All'*. This was about seven areas; living in communities as ordinary citizens, promoting the independence of persons with disabilities, promoting a barrier-free society, targeting the quality of life, assuring safety livelihoods, removing psychological barriers and promoting international cooperation and exchanges (Shirabe, 1997 pp: 2).

3.2.2.3. Institutional Structure Related to People with Disabilities

In Japan, measures at national level are carried out through Cabinet ordinances, ministerial ordinances and various kinds of notices. At the local government level, programs and services are carried out based on various kinds of regulations (JSRD (b), 1997, pp: 12-13).

Japanese institutions about disability issues is dissociated according to different governmental bodies, mainly as ministries, that are based on general topics, to sum up, institutional structure is distributed. Main Japanese institution is Prime Minister's Office which formulates basic plan for disabled people and works on awareness raising and public relations such as regional conferences to promote measures, programs promoting awareness on persons with disabilities, etc. (JSRD (b), 1997, pp: 12).

The other governmental body, Ministry of Health and Welfare's duties era prevention of the cause of disabilities, early detection and treatment, various welfare measures, life security and medical care, etc. Under this Ministry, Advisory Council on Welfare of Physically Disabled Persons and Department of Health and Welfare for Persons with Disabilities are situated in. One more ministry is Ministry of Education, Science and Culture which interests in special education. While Ministry of Finance takes measures for taxation, Ministry of Labour works on employment measures, vocational training, and compensation of industrial accidents (JSRD (b), 1997, pp: 12-13).

Needing public consciousness to raise, lessons were started for schoolchildren and they are informed about problems of people with disabilities and elderly by also visiting institutions and participating in aid project in volunteer (Toshihiko, 2005, pp: 5).

The governmental structure related to accessibility and built environment is based on three ministries. First is Ministry of Construction, which has duties on improvement of public buildings and roads, providing public housing for physically and mentally disabled persons, prioritising for getting into public housings and discount of fees for different services. Next is Ministry of Home Affairs working on measures for taxation related to disabled people. Last one is Ministry of Transport. This Ministry carries out improvement of public transportation facilities and discount of related services, etc. Moreover, audible traffic signals for visually impaired persons, exception to the no-parking rule, and consultation on driving aptitude are duty of Ministry of Police. Ministry of Post and Telecommunication applies reduction and exemption of related services (JSRD (b), 1997, pp: 13).

3.2.3. Legislation and Practices Related to Accessibility

Japanese Society for Rehabilitation of Disabled Persons (1997 (b), pp: 4) draws developments of period of 1970s. In 1970, when a group of wheelchair users from an institution wanted to go around the city, they could not achieve that because of curbs on every corner of the sidewalk. After this incident, a new campaign was started and Citizens Assembly to Build a Welfare-conscious Town was founded. Accessibility started to gain importance and the campaign carried on by wheelchair users spread over other towns and cities. It is declared that needs of people with disabilities must be considered in urban planning. Afterwards, these campaigns expended a general accessibility needs including other types of disabilities (JSRD (a), 1997, pp: 4). Since built environment accessibility gains interest recently, laws of accessibility are newer than other disability laws.

In Asian and Pacific Decade of Disabled Persons, the Act on Making Buildings Accessible and Useable for the Elderly and Physically Disabled Persons related to making the built environment more accessible with standards including elevators, widths, Braille indications and signs, etc. was enacted in 1994 (Takada, 2003 pp. 3). The aim of the Law is to build public buildings according to needs of people with disabilities. For specialised buildings such as hospitals, theatres meeting places, exhibition centres, department stores, hotels, etc., on the other

hand, design modification for entrance, corridors, stairs, washroom, etc. is encouraged. Prefectural governor can be advisor and make order to modify or to withdraw owner authorization (JSRD (b), 1997). But Osuga (1997 pp: 2) states that there are some problems with exempted medium-sized public buildings and transportation and educational facilities from measures according to their relation with different ministries.

The Law for Promoting Businesses that Facilitate the Use of Communications and Broadcast Services by the Physically Disabled Persons dated 1993 arranges media like telecommunication and broadcast accessibility with subsidies for production of superimposed television programs or narrations explaining the action. Besides, there are two more laws on telecommunication; the first is Mail Law dated 1947 and second is Telecommunication Service Law dated 1984. Both of the laws include some reductions and exemptions in prices of services (JSRD (b), 1997, pp: 13).

The Law for Promoting Easily Accessible Public Transportation Infrastructure for the Aged and the Disabled related to construction stations and transportation vehicles barrier-free for disabled people, elderly, pregnant, mothers with babies, etc. were formulated (Takada, 2003, pp: 3).

Public Housing Law dated 1951 provides larger living space for families with persons with disabilities, priority in getting public housing and lowering rent (JSRD (b), 1997, pp: 3).

For visually impaired persons, Road Traffic Law dated 1960 gives safe transportation opportunity by prohibiting walking with white or yellow cane and guide dog (JSRD (b), 1997, pp: 9).

Accessibility practices started after 1970s. In 1974, in leading of Machida City, Tokyo which prepared the Outline for Environmental Improvement to Build a Welfare Community, the Ministry of Health and Welfare created model cities and other municipalities adds owns outlines and guidelines. In this process, administrative and quasi-public function private buildings have been gradually improved (Osuga, 1997, pp: 2). Afterwards, the Ministry changed the policy as “An Environment of Increased Amenities for Persons with Disabilities” in 1979. The Ministry of Construction published “the Planning Standards of Buildings in Respects of Disabled Persons” in 1982 (UN, 1995). In 1988, it is given by Hayashi (1988) that 194 cities and towns participated in program and took policy measures for accessibility. After several design guidelines were prepared in different dates, a

loan for cost of building improvement suitable for guidelines was started by the Ministry of Construction.

Osuga (1997, pp: 1) asserts that high-rise and four-five-story apartment buildings have become more accessible according to installation of elevators. Public houses, on the other hand, have some facilities like width of doorways, easy-to-use bathrooms and kitchen for wheelchair users. However, majority of apartment houses are not suitable for wheelchairs. In the Report of Cabinet Office (2005) houses of 60% of persons with physical disabilities should be improved.

Street accessibility is considered after demonstration mentioned above. Then after, Ministry of Construction declared to cut down sidewalk steps in 1973, which emphasized all around the country's streets. However, in 1997, it is reported by Osuga (1997, pp: 1) that because of too steep ramps, too narrow sidewalks, sidewalks having an entrance for automobiles and infrastructure constructions, sidewalks are not accessible except for newly constructed ones. In contrary, Braille bricks for blind and visually improved people are laid on streets, on platforms and in public buildings in order to indicate the level difference. Moreover, some traffic signals are designed with music or chime.

After 1990s, it is asserted that in addition to physical structure, services provided by supermarkets and restaurants are improved, which is evaluated as philosophy of normalization Osuga (1997, pp: 2).

When transportation is researched, it is seen that special services have been developed with ramp or lift equipped automobiles as door-to-door services. In trains and subways and their infrastructure, after years with problems experienced by disabled people, the Ministry of Transport took some measurement about escalators and elevators installation in stations in 1991 and 1993. Wheelchair place in trains, Braille bricks on platforms since 1983 and Braille information boards are other accessibility practices in railway transportation. Buses, as most familiar mode of transportation, also had several problems in the past. More accessible buses have been put in operation recently, but it is reported that the number of those is not enough as 1 to 2% of the total number (Osuga, 1997).

Hayashi (1988) gives a survey's conclusions about non-handicapping environment realization process of local governments. The survey was conducted by the Sub-Committee for Non-Handicapping Environments of the Architectural Institute of Japan. According to the survey, larger cities have guidelines in

compare with smaller ones. The guidelines have well defined content. However, there are some problems with guidelines; for instance; they are optional and cost of application is high amounts.

3.2.4. An Assessment of Participation of People with Disabilities to Public Life

According to the interview made by Hayashi and Okuhira (2001, pp: 868), disabled people declared that there are many issues that should be improved; accessible community and accessible transportation system, benefit for disabled people living in institutions, presentation of disabled people in social and political system by disabled people like Ombudsperson and independent living services excluded system for psychiatric or intellectually disabled people.

According to Japan Cabinet Office (2005, pp: 6-7), the ratio of physically disabled people living alone is less than 10%. While most of intellectually disabled people live with parents or relatives, the ratio of mentally disorders people living alone is less than 20%.

Daily life activities of people with disabilities are other matters that are elaborated by Cabinet Office (2005, pp: 15). It is seen that while people with hearing, speech disabilities and internal organ disabilities can do daily activities themselves completely, the ratio of ability of going shopping as a daily activity is lower with visually and physically disabled people as 60% and 50%, and mentally disabled ones as 70%.

In 2005 (Japan Cabinet Office, 2005, pp: 8), 40% of children with disabilities stay at home. The education of disabled people is compulsory and special education has developed in last two decades. However, too few motor disabled, mentally retarded and health impaired youth participate high school education equally with others. There is another data about high school that while 95% of children without disabilities attend to high school, only 70% of disabled ones attend. Regular classes are preferred by parents having disabled child in terms of special classes under the risk of discrimination, not because of being progress in mainstream education (Toshihiko, 2005, pp: 2). Besides, while two percent of three intellectually disabled people live in homes, others stay in institutions (Terashima, 2004, pp: 2).

What disabled people do after education is as important as education level. Information about this matter is given in 2005 Annual Report by Cabinet

Office. Blind children, for example, continue a higher school or use welfare or medical facilities. Deaf children, on the other hand, proceed with higher education or find a job. Others, intellectually, physically disabled or health problems use welfare or medical facilities.

While Japanese employment system promotes only physically disabled, a revision provides mentally retarded people with employment support. The Law is designed according to quota system requiring 1.6% of total employees to be disabled workers in companies and government agencies. However, the rate of disabled workers is 1.32% in 1991. In other words, 48.2% of all businesses do not give work opportunity to people with disability obliged (Employment Security Bureau of the Ministry of Labour, cited in Toshihiko, 2005, pp: 3). Disabled people often have to work in small and medium-sized businesses. Besides, disabled workers take low wages generally because Japan minimum wage law excludes mental or physical disabled people. Some new work fields have been created by a movement including parents, teachers and volunteers and government began to give grants (Toshihiko, 2005, pp. 3). Income rates of disabled people are lower than regular employees and persons with intellectual disabilities' wages are rather lower than people with mentally and physically disabled (Japan Cabinet Office, 2005 pp: 13).

In 1985, after basic pension system was set up, young disabled people under the age of 20 began to receive pension. But the system is related to almost severe disabled people. On the other hand, Toshihiko (2005 pp: 4) asserts that disability pensions are low and a definite group can receive it. .

Besides, Japan Cabinet Office (2005, pp: 15-16) notices some matters affirmed by disabled people themselves. People with visual impaired, hearing/speech and intellectual disabilities are faced with communication barriers in common. Certainly, physically disabled people live problems with architectural barriers, especially with level difference, slight step, public toilets and car park spaces. Other disabled people assert that they are exposed to insufficient consciousness on their needs.

3.3. Afterthoughts: a Comparison of Two Countries

According to the examination carried out in this chapter of the study, United Kingdom and Japan appear as rather different countries in terms of disability issues. In this part, a brief comparison is prepared in order to find out how

these two selected and rather different countries have experienced the disability matters.

First of all, official definition is important because this definition implies the approach towards the disability concept and gives us an opinion about country's general perception of disability. Before present definitions, to investigate how the approach to the issue has changed over time is useful. First conceptualisation of disability appears that disabled persons have been isolated from society through institutionalisation. In this period, disability has been equated with oddness. In the next period, being an odd person ended and professions' medical domination has started for disabled people. Disability is seen as a pathology which has to be cured. In all of these years, disabled people have stayed in institutions. In 1940s, first Acts of welfare state epoch have continued the medical cure approach, in other words, 'illness and dependent person' notion is not changed. With Chronically Sick and Disabled Persons Act of 1970, the situation has not differentiated.

In Disability Discrimination Act 1995 of UK the state of being disabled is connected with a person's physical or mental condition and its negative effect upon carrying daily activities.

Japan disabled people have lived as isolated from society like disabled people in the UK, however, they have been cared by their families. In first legislative arrangement, it has been aimed to provide some catering for disabled people with poor, elderly, young and sick people. In the first national policy Act, veterans and physically disabled people have been handled through occupational 'rehabilitation', in other words, adapting disabled person to normal employment conditions. In 1961, pension was started to pay disabled people and residential institutions were established because disabled people have been seen in need of social and care support.

In the 1993 Disabled Persons' Fundamental Law, which includes long term limited daily life due to a physical disability, mental retardation or mental disability definition, thus the issue is not assessed differently from the UK. Both of the current conceptualisation of disability focus on individual's features, and see restricted daily life as the result of this condition. In fact barriers as all kinds of manner are not considered as a part of this process, and in short, definitions can be criticised as being set up line with the medical approach towards disability.

After clarifying the definitions, demographic profile of the countries should be investigated. While 18.5% of the population is reported as disabled in UK, this

rate is rather lower in Japan as 5.3% in total. This disparity in the rates can be interpreted as emanating from extent of Laws' scope of the disabled. For instance, while in the UK chronic illnesses are inserted in disability, only physical (including orthopaedic, visual and hearing impairments) and intellectual disabilities and mental disorders are accepted as disability categories in Japan.

It can be derived that how disability is described and identified is important for a country orienting the politics and practices. From this figure given above, one can say that there are more disabled people live in the UK and more provisions have to be provided for them in this country pressure of needs and demands of a larger proportion of the population.

Historical backgrounds of the disability issues in these countries are similar in terms of experiences but different in terms of dates. Institutionalisation is seen as a common problem in the past of the two countries. For UK, with the effect of adverse social and state attitudes, disabled persons had been confined of to the buildings has been realised in the period of 17th–19th centuries. Religious charity organisations have been found, medical care has been developed and community based services have been expanded in the 20th century. In Japan, people with disabilities have experienced rather different process which traditional carers, families or parents have demanded institutions from the state in 1960s to look after the disabled persons and those people began to stay there. At the same years, disability organisations set up 1940s and 1950s have started to discuss the disability issues in the Japan Society. In England social activists have begun to protest against barriers in the same periods. Discrimination has been the main topic for struggle in both of the countries; however institutionalisation was still in process, several events have emerged related to the bad conditions of institutions. While independent living collective struggle have been realised in the UK and achieved enactment of the DDA, Japan movements have concluded the foundation of living centres and other problem fields have remain as fragments of an issue.

Disability legislation of two countries is rather different. Whilst there is a frame law, DDA, in the UK as one of the very few examples all around the world, in Japan politics and practices are carried on by 120 different laws in addition to Disabled Persons' Fundamental Law which includes only the basic principles in Japan. Although the enactment date of Disabled Persons' Fundamental Law (1970) is older than DDA 1995, the revision date is similar (1993). The other Japan

Laws have been prepared according to disability groups or daily needs. On the other hand, it can be said that DDA sanctions has been imposed for different fields especially for accessibility as mentioned in former parts, only practice has been encouraged by the legislation in Japan. The real practices have been initiated after local pressures of disabled people and their organisations and the praxis have expanded through other regions with the effects of those pressures. It should be added that the content of the DDA is still criticised by many parties of the issue.

Several governmental organisations have been established in order to implement the DDA in a more effective way. In Japan, as legislation is various, its implementation is also conducted by different ministries.

In the UK, accessibility has been a provision since 1985 and it has been applied to new buildings and ground floor extensions of the existing buildings since 1999. Access to goods, services and facilities are elaborated by DDA in terms of prohibiting discrimination against disabled people. However, access standards for new buildings, not for existing ones are criticised in many references. In Japan, with the beginning of campaigns of 1970s against inaccessibility practices of local governments, some provisions have been made for more accessible environments. 1994 Law includes public buildings and most of the dwellings are reported as improper for the use of disabled people. In conclusion, after several legislative arrangements, there are still many problems for people with disabilities in use and facilitate built environments and they also experience many participation problems in both of the countries.

In the participation assessment part of the study, the period after 1995 Act is taken consideration for UK where there are many researches with the aim of finding the level of participation in public life. While physical barriers in the public places such as pleasure activity areas, public buildings, transportation system and polling stations are reported in 2003, social barriers like prejudice and hostile attitudes are seen in the widespread parts of the community. In Japan, there are official rates for disabled people's participation to social life. Communication barriers create difficulties for people with visual impaired, hearing/speech and intellectual disabilities, several types of architectural barriers stand against the physically disabled people.

To sum up, these two countries have achieved a certain development described in former chapter. This developmental process and current disability issues have a long historical background. Firstly, they succeed in discussing

disability problems with disabled parties and considering their needs in some degree. Secondly, the existence of disability organisations at the all manner, as old and effective organisations, enabled local wheelchair users or patients staying an institution to influence state and societies, and afterwards these organisations have got many rights along with protests, campaigns, and as whole social movements. In spite of having many legislative measures and provisions, it can be said that accessibility is not achieved completely in both countries. Therefore, the importance of social and physical dimensions of space appears clearly as the important factors in this point. In the next chapter, the country will be examined is Turkey where disability issues are introduced recently.

CHAPTER 4

CASE STUDY 3: DISABILITY AND ACCESSIBILITY OF PEOPLE WITH DISABILITIES IN TURKEY

For Turkey, even though the first Act about disabled people is rather old, the subject and problems of disability are just coming to the governmental and social agenda. Traditional family situation, charitable social construction, bureaucratic system and medical treatment for disabled people have delayed tackling the issue scientifically and approaching and comprehending in a social manner. Advances have been realised in the effect of obligatory measures of United Nations, and some newer requirements from European Union have also been indicating.

There are several legislative compulsory instruments for both of public and private sectors; it can be asserted that disability is a problematic in Turkey with not its theory but with its practice.

Accessibility constitutes one of the constant and basic problem areas of disability. Therefore, before investigating accessibility in Turkey, demographic profile of disabled people, historical background, disability legislation, institutional structure, are examined like selected two other countries. Later, accessibility legislation and participation level of disabled people in Turkish social life are evaluated. Afterwards, the survey on local agencies approaches towards disability matter is given in detail at the last part of the chapter.

4.1. Demographic Profile of Disabled Population in Turkey

In the Turkish People with Disabilities Act dated 2005 (Article 3 (a)), disabled people are defined as;

> Disabled is the person who has difficulties in adapting to the social life and in meeting daily needs due to the loss of physical, mental, psychological, sensory and social capabilities at various levels by birth

> or by any reason thereafter and who therefore need protection, care, rehabilitation, consultancy and support services.

Turkey like many other countries had used World Health Organisation's forecasts for long years because there is no sufficient information on disabled population. Today the information about disabled people is based on first and only study, Turkey Disability Survey completed in 2002. The Survey was carried out by the State Institute of Statistics for the first time in cooperation with The Presidency of Administration on Disabled People and The State Planning Organisation.

In the Turkey Disability Survey, disabled person is accepted as the official manner which refers to person who has lost at least 40% of his/her working capacity as certificated by an authorised hospital medically.

Information about age, sex, education, marital status, labour force, social security, and their expectations from institutions of disabled population is compiled in this survey. Moreover, information about the type of disability, appearance time, cause and degree of disability, status of treatment and using apparatus, which is presented the conditions of disability, is provided with this survey. The population exposed to chronic illnesses a type of disability is also evaluated for the first time in the survey.

In the survey, 120.600 households are selected to reach targeted estimation. Field study of the survey was conducted in December 2002. At the result of field study, 97.433 households are interviewed face to face.

According to the Survey (State Institute of Statistics, 2004, pp: 5-6) total disability proportion in the overall population is 12.29% and there is nearly 8.5 million persons with disabilities in Turkey. The proportion of orthopaedic disabled is 1.25%, visual impaired is 0.60%, hearing impaired is 0.37%, speaking impaired is 0,38% and mentally disabled people are 0.48%, and total is 2.58% and the proportion of people having chronic illnesses is 9.70% as well.

9.71% of the disabled people population is under the age of 15 and 18.87% is over the age of 65. 12.69% of the urban population is disabled while this rate is 11.67% in rural areas.

According to geographic regions, highest disability proportion is in Marmara Region with 13.13%. Second one is Blacksea Region where disability rate is 12.98%. Central Anatolia has the rate of 12.52%, Mediterranean Region has 12.16% disabled people population, Aegean Region has the rate of 11.89%, in Eastern Anatolia the rate is 11.80% and Southeast Anatolia has 9.90% disabled

population in total population of Turkey (State Institute of Statistics, 2004, pp: 39-41).

In the survey, life conditions and different problems of people with disabilities are searched under the four issues as rehabilitation, education, social security and employment. Moreover, disabled population demands are asked in addition to difficulties which effect daily life.

Causes of disability are one group of the surveyed issues, which may be most important indicators for disability politics about prevention of disability in the future. Appearance time of disability is also surveyed. According to the results, orthopaedic (73.30%), hearing (67.10%) and visually (76.32%) impaired people having subsequent disability. On the other hand, there is no important difference between appearance time of disability of speaking and mentally disabled people.

4.2. Turkish Legislation and Institutional Structure Related to People with Disabilities

4.2.1. Historical Background of Disability in Turkey

Disability issues and related legislation have been developed with contribution of international events and documents. In Ottoman Empire period, it is seen that only some social services had been provided for elderly and disabled people. Altan (1976, pp: 167-170) gives that indeed some institutions have been established especially for people mental health problems, it cannot be mentioned that disabled people have experienced any institutionalisation pressure. These institutions have only been set on for rehabilitations and treatment. In this period, some financial aids have provided by state for people with disabilities and their families. Altan (1976, pp: 170) also presents an important dimension of disability issue in Turkey that traditional family construction and neighbourhood relations based on religious attitudes and protection and look after approaches have designate main social relations for people with disabilities.

After Republic is established, in 1923, first development occurred with Geneva Agreement, signed by Turkey, and comprises rights of children and children with disabilities (Administration on Disabled People, 1999, pp: 176). In the Republic period, several health and welfare measures came into force and for the first time local authorities were obliged duties about disabled people by the Municipalities Act (No: 1580).

Disability issues have been aware with disabled children's needing special care and their protection in Turkey. In 1949, Regulation on Children Requiring Special Care was passed and in 1951 responsibility of Special Care Centres was transferred from Ministry of Health to Ministry of National Education. This is the first step of development process, thus disability is subject of education in addition to subject of health. Then, in 1957 a law (No: 6972) was set into force to secure the services and to take necessary measures for the children requiring special care by the Ministry of National Education.

After some remarks about productivity of disabled people and special education put into Turkish Constitution in 1961, special items were added to the Law of Primary Education regarding special education and subsequently Regulation of Special Education was set into force. In 1976, National Education Law (No: 1739) included that special education is an integral part of the education system.

In this period, governmental and civil rehabilitation centres were founded. Law of Labour (No: 1475), on the other hand, was amended to fix an employment quota of 2% for disabled person in 1971. The Law of securing the employment and a certain level of livelihood for unemployed persons with disabilities and the ones over the age of 65 (No: 2022), which it is used still as one of the important instrument, currently was set into force in 1976.

4.2.2. Turkish Legislation Related to People with Disabilities

After historical developments, The Constitution of 1981 states that; it is the duty of the State to secure the necessary services for disabled people in Articles 42, 50, 56, 59 and 61.

Two years later, the Law of Institute for Social Services and Protection of Children passed in 1983 and determined that the education of the children with disabilities will be done in the schools of Ministry of National Education and other government education facilities.

When the Law of Associations came into force in 1983 (No: 2908), all the civil initiatives and NGOs serving to people with disabilities have to be a member of four different types of disabilities federations which is linked to a nationwide umbrella organisation Turkish Confederation of People with Disabilities.

One more development occurred in this process was about International Agreement of International Labour Organisation Agreement (No: 142) accepting by the Turkish Government in 1992. The Agreement secures the equal opportunity of persons with disabilities in economic life specifically for the job trainings.

As a milestone, Administration on Disabled People was founded in 1997 with the Decree Act of 571, one of synchronous three Acts. Aims and duties of the Administration are to coordinate and co-operate governmental institutions, universities and non-governmental organisations related to disability issues, to contribute to make national disability politics, to make research on international developments, and to discuss problems faced by disabled people and their solutions.

At the same time two more Acts came into force, as mentioned before. First one is the Decree Act of 572 that made some amendments and additions current legislation by describing the principles for the implementation of services for persons with disabilities. In this Act, equal participation of persons with disabilities to social life, increasing awareness and sensitivity about disability in society, providing adequate and sufficient medical care and rehabilitation, and promoting mobility and independent living abilities of disabled individuals are stressed and put into the related legislation.

Besides, accessibility term, its necessities, barrier free built environment, and accessible public transportation were added to Urban Development Act and six related regulations that they will be given in later part of the chapter in detail.

Equal educational opportunities for persons with disabilities throughout the life span and improvements in employment facilities for disabled individuals, in other words, rearranging work environments and redesigning equipments/instruments according to the needs of persons with disabilities and precautions were also arranged by the Law.

Social security, revenue, and protecting family life and personal integrity/unity of persons with disabilities were mentioned and their full participation in cultural, recreational, sporting, and religious activities and full participation in the decision-making processes for actions toward persons with disabilities were guaranteed, too.

Last Act is 573 numbered Special Education Needs Act. To compensate for the Act 573 was legislated in 1997. The Act was inspired by experienced

problems in the field of special education and needs of improving the quality of education for individuals with special education needs and described the implicit and explicit educational services that are to be provided to disabled individuals. It also defines programs, schools and institutions that would provide these services. As this act states the right of disabled individuals to benefit from early intervention, preschool, elementary, secondary, and high school education system, mainstreaming was guaranteed. Act 573 brought a new perspective to services in the area of special education. Mainstreaming in education, ending up of classification based on discriminative labels, and early intervention are some most important issues introduced by the Act.

The newer Act of People with Disabilities (No: 5378) was enacted in 2005 as the name of Act on Disabled People and on Making Amendments in Some Act and Decree Laws, which especially non-governmental organisations had wanted a frame law for several years. However, this Act cannot be accepted as a frame law, because it has not comprehensive features. After the Act, there is much other legislation in force implemented by different state bodies.

The People with Disabilities Act can be presented with its three features. Firstly some new concepts and terms for Turkey came into force with the enactment of the Act;

- For the first time discrimination concept is mentioned in legislation about disability. The Law brings that “State develops social policies against all kinds of abuse of disabled people and disability on the basis of the immunity of the human honour and dignity. State doesn’t discriminate against the disabled people; fighting against discrimination is the basic principle of the policies towards the disabled people (Article 4).
- International Classification of Functioning (ICF) system will be applied in order to determine situation of disability for a person.
- In subject of employment of disabled people, some new measures against discrimination came in the force.
- Some new preventive measures against disabilities are included.
- Municipalities are obliged to open special unit serving to people with disabilities.

- Some new duties are given to municipalities about creating accessibility in open spaces, public buildings, social and cultural infrastructure areas and public transport within seven years after the date of effect of this Law.

Secondly, several amendments to existent legislation were made;

- Care services are envisaged to be improved under the overall control of Social Services and Protection of Children Institution.
- Vocational rehabilitation services will be disseminated wider, and municipalities will provide rehabilitation services as local level.
- Encouragement of protective work places and increasing penalty are come into force.
- Financial and some material support are proposed in educational services.
- Social aid amounts are increased.

Lastly, the Decree Act of 571 Administration on Disabled People and Constitution Act of Social Services and Protection of Children Institution were amended with the People with Disabilities Act.

An important point should be arisen a discussion is about state support services which have been caused socio-spatial isolation in the past of the countries (Gleeson, 1999, pp: 139). This issue reminds us features of state support services encompassed with legislation in Turkey and their debatable effects on disabled people's life. While this process has been experienced through institutionalisation in the UK and Japan, social supports including monetary aids given to disabled people have created long term effects on isolation.

4.2.3. Institutional Structure Related to People with Disabilities

Turkey's implementations about disabled people have been influenced developments about disability issues in the world directly. Likewise, first institutional structure, National Coordination Council for Protection of the Disabled People was established after the announcement of 1983-1992 Disabled Persons Decade by UN. The Council worked under the Ministry of Labour and Social Security until 1997 in order to coordinate services for disabled people. In 1997, Administration on Disabled People was founded by the Decree Act of 571.

Administration on Disabled People under the Prime Ministry has worked since 1997 as the main body on disability issues. As mentioned before, Administration makes coordination and co-operation among governmental

institutions, universities and non-governmental organisations working on disability issues, contribution for making national disability politics, production several solutions of problems faced by disabled people, and works in order to increase social consciousness and making society become aware of disability. Administration on Disabled People is not a practitioner institution.

The Administration has two important bodies; Summit of Disabled People is main body for formulating and directing the national policy on disability and Council (Congress) of Disabled People is the highest consultant body of Administration.

Apart from Administration on Disabled People, there are several governmental bodies working on disability. Institution of Social Services and Child Protection carries on rehabilitation and caring services, Ministry of Health carries on protective health and medical treatment services, Ministry of National Education carries on special education as the level of policy and practise and Ministry of Labour and Social Security carries on vocational rehabilitation and employment measurements.

There is two Confederations of People with Disabilities and four Federations related to visually impaired people, hearing impaired people, orthopaedic disabled people and mentally disabled people in Turkey.

On the other hand, built environment is planned, designed and created mostly by local governments in Turkey. These institutions have statutory responsibilities for accessibility in newly built areas and improved spaces actually. Moreover, several social, cultural and urban services are offered by municipalities and people with disability have the same right to access, use and profit from these services as members of the society like everybody else. The responsibilities and duties of municipalities are defined by the Municipalities Law dated 2005 and numbered 5393 and the Greater Municipality Law dated 2004 and numbered 5216, which are given later in detail.

4.3. Legislation and Practices Related to Accessibility

Turkish accessibility legislation can be investigated in two categories; first is legislation about Urban Development Act and six amended regulations which gives accessibility responsibility for new development areas and second is People with Disabilities Act articles which force accessibility in build areas.

Firstly, in Urban Development Act numbered 3194 and dated 1985, there is an article about accessibility (Additional Article 1);

> It is an obligation to conform to relevant standards of Turkish Standards Institution in development plans and urban, social and technical infrastructure and buildings in order to provide built environment accessible and liveable for people with disability.

This article was added by the 1997 Decree Law of 572 which gave the responsibility of making amendment in related regulations in the Urban Development Legislation to Ministry of Public Works and Settlements. The ministry in cooperation with Administration on Disabled People put into force a number of amendments about providing accessibility and needs of people with disability in built environment in the six related regulations in 1999. The name and amendments of these regulations can be summarised as;

Municipalities Standard Building Regulation: For the first time, disabled person is defined in the legislation about built environment. Moreover, accessibility and standards of Turkish Standard Institution about arrangements for disabled people in the built environment are mentioned for the first time again. Municipalities are given the duty of obeying the standards and legislation about disability, implementing them and making necessary provisions apart from matters not being placed in the legislation.

In the Regulation, accessibility requirements and necessary measures and criteria are provided in buildings such as entrances with ramp, suitable doorway, corridor and flat unit width and height, circulation area and handrails etc. Accessibility considerations in defined commercial buildings are also included in the Regulation.

Moreover, particular arrangement requirements are identified for open areas like sidewalks, squares, pedestrian areas, parks and facilities and urban furniture on them have to be accessible according to the regulation.

Urban Developments Regulation of Non-planned Areas: A number of accessibility criteria are put into this regulation in the parallel with former regulation. Design and implementation according to the Turkish Standard Institution's standards carry importance again. There are necessary measures and other requirements for buildings and commercial facilities in the Regulation too.

Regulation of Principles for Planning: According to the Regulation, in the plans, all of the urban utility, social and technical infrastructure and buildings have to take necessary conditions in order to provide built environment accessible for people with disabilities and the plans are suitable to standards. Besides, rehabilitation centres are included as an urban utility.

Application Regulation of Law of Slum Areas: The stipulation of appropriateness to Turkish Standard Institution's standards is enacted for works carried on in the areas of the Regulation's scope and accessibility requirements are given in detail.

Regulation of Car Parking Areas: Car parking areas of public buildings, common and regional parking areas have to comprise standardised and marked parking lot at the rate of 5% of total, according to the Regulation amended.

Additional Regulation about Shelters: According to the Regulation, shelters have to be suitable for Turkish Standard Institution's standards related to accessibility for disabled people.

Greater municipalities have the opportunity to prepare their own urban development regulation. These regulations cannot reduce measures or criteria included by Municipalities Standard Building Regulation. In Ankara, Greater Municipality enacted its own last regulation in 2006. This regulation includes accessibility requirements for buildings in accordance with Standard Building Regulation. For open areas under the responsibility of the Municipality, some provisions were also put into the Regulation. Turkish Standard Institution's standard also referred by the Regulation.

As can be seen, all of the amended legislation about built environment refers to standards prepared and published by Turkish Standard Institution. There are three standards about accessibility of disabled people directly and more about accessibility and disabled people;

TS 9111 (dated 1991) Specifications for Designing Residential Buildings for the Disabled: The Standard includes measures and other requirements for accessibility from near environment of a building to building units. Entrances, stairs, elevators, circulation areas, doors, corridors, rooms, toilets, bathrooms,

bedrooms, kitchens are elaborated with design details, for example; tactile and audible signals, colours, characteristics of floor materials etc.

TS 12 576 (dated 1999) Structural Preventive and Sign (Pictograph) Design Criteria on Street, Boulevard, Square and Roads for Handicaps and Elderly Persons in Urban Areas: Easy mobility arrangements for people with disabilities on sidewalks, pedestrian crossings, ramps, stairs, floor materials, bus stops, car parking areas, public toilets and telephones and urban furniture and materials with necessary signage are the main subjects of the Standard.

TS 12 460 (dated 1998) Rail Rapid Transit System in Urban Part 5- Design Criteria of Facilities for Handicap and Elderly People: In the Standard, there are design considerations for providing accessibility in near environment of station, in station and rail vehicles. Several measures for wheelchair users, circulation areas, elevators, escalators, handrails, stairs and platforms, tactile and audible warning and information signage are included in the Standard.

Although these standards are referred by urban development legislation frequently, they have not obligatory status, in other words they are optional, local agencies and other related parties do not use them necessarily.

There are many other standards which include several measures or criteria for disabled people in Turkey. In the study, the basic ones are explained in detail.

The second legislative arrangement for providing accessibility for people with disabilities is about the Law of People with Disabilities numbered 5378 and its articles about accessibility.

In the Law, Provisional Article 2 gives that the existing official buildings of the public institutions and organizations, all existing road, sidewalk, pedestrian crossing, open and green areas, sporting areas and similar social and cultural infrastructure areas and all kinds of structures built by the natural and legal persons serving to public shall be brought to suitable condition for the accessibility of the disabled people within seven years after the date of effect of this Law.

The next article, Provisional Article 3 includes Greater Municipalities and municipalities take the necessary measure to make sure that the mass transport services in the city provided or controlled by themselves shall be brought to

suitable condition for the accessibility of the disabled people within seven years after the date of effect of this Law.

Besides, the Law of People with Disabilities numbered 5378 revised the Flat Ownership Law numbered 634. With the Article 19, an amendment was made in the Article 42 of the Flat Ownership Law.

According to this amendment, in the event that there is an obligation for the lives of the disabled people, project amendment is decided by the majority of number and land share after being discussed in the meeting to be held latest within three months by the unit owners. In case that the meeting cannot be held within this period or the amendment request is not accepted by majority; construction, repair and installation are made according to the certified project amendment or sketch to be obtained from the concerned authorities upon the request of the concerned unit owner on the basis of the commission report which states that safety of the building is not endangered. The concerned authorities finalize the project amendment or sketch requests latest within six months. The methods and principles regarding the establishment of the commission, operation method and the process after the usage by the disabled person are determined by the regulation to be issued jointly by the Ministry of Public Works and Settlement and Administration on Disabled People.

4.4. Assessment of Participation of People with Disabilities to Public Life

Turkish disabled people's participation to social life can be evaluated with the help of the data provided by 2002 Disability Survey (State Institute of Statistics, 2004) findings.

When the literacy status of people with disabilities are considered, illiteracy rate is 36.33% for people with orthopaedic, visual, hearing, speaking and mental impairment and 24.81% for people with chronic illnesses while this rate is 12.94% for total population in Turkey (State Institute of Statistics, 2004, pp: 8). On the other hand, unemployment rates are as 15.46% for orthopaedic, visually, hearing, speaking and mentally impaired people and 10.77% for people with chronic illnesses (State Institute of Statistics, 2004, pp: 16).

In the Survey (State Institute of Statistics, 2004, pp: 30-31), expectations of disabled people from governmental organisations are also asked. While 61.22% of the disabled people want to take financial support assistance, the proportion of expecting working assistance rate is 9.55%. At lower levels, other demands are

creation of educational opportunities with the rate of 3.31%, defence of legal rights with the rate of 3.51%, and treatment and care service by health personnel at home with the rate of 4.12%.

Accessibility situation and difficulties experienced by disabled people are investigated by the Survey certainly. When “are there suitable arrangements for your disability in building, street and roads” is asked, the responds are as in the following table;

Table 5: The rate of people with disability who say there are suitable arrangements for his/her disability in building, street and roads (2002 Turkey Disability Survey, Detailed Analysis)

	Orthopedically disabled	**Visually impaired**	**Hearing Impairment**	**Speaking Impairment**	**Mentally Retarded**
Yes	**3.0%**	**2.6%**	**2.3%**	**3.1%**	**1.8%**
No	**68.7%**	**65.0%**	**66.8%**	**67.6%**	**66.4%**
Unknown	18.0%	22.0%	21.9%	19.6%	21.5%
9	10.3%	10.3%	9.1%	9.6%	10.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

According to the table, the majority of people with disability encounter with barriers in his/her settlement.

One more data from 2002 Turkey Disability Survey is about adversities for people with disability in daily activities. The table below is prepared with answers given by disabled people as related to accessibility and shows those for each disability group.

Table 6: Adversities for people with disability in daily activities according to disability group (State Institute of Statistics, 2004, pp: 108-117).

Orthopedically disabled				
Total	Lack of environmental arrangements	Cannot enter to public buildings	Cannot use public vehicles	Cannot participate social and cultural activities
%100	% 27.1	% 23	% 42.9	% 23.6
Visually Impaired				
Total	Cannot enter to public buildings	Cannot use public vehicles	Cannot participate social and cultural activities	
	% 35	% 34.7	% 27	
Hearing Impairment				
Total	Lack of visual signage and alert	Lack of communication facility		
	% 38.6	% 38		
Speech Impairment				
Total	Lack of visual signage and alert	Cannot participate social and cultural activities	Lack of communication facility	
	% 39	% 39	% 38	
Mentally Retarded				
Total	Cannot participate social and cultural activities			
	% 40			

4.5. Afterthoughts: an Assessment of Disability in Turkey

It would not be a mistake to say that disability issue has been neglected as socially and politically until mid-1990s in Turkey. The issue is rather new for Turkey. Until 2002, there has not been any statistical data about people with disabilities. For this reason, disabled people are not sufficiently recognised by the community and still the dominant approach of the society was paternalistic and

shaped on charity. Moreover, level of awareness and consciousness about the characteristics and needs of people with disabilities is rather low in all of the spheres of life as bureaucratic, governmental and decision making systems, social and community life, attitudes and behaviours, and so on.

When the historical background is evaluated, it can be asserted that approach to disability has focused on disabled person's individualistic characteristics supposing his/her deficiencies, his/her personal incapacities and (his/her) dependency on the other able or normal people. The recent official definition also reflects this approach by revealing difficulties of people with disabilities which they face in social and daily life sourced from physical, mental, psychological, sensory and social incapability. Consequently, the need for protection, care, rehabilitation, consultancy and support services is stressed by the Law, which strengthens the prevailing medical model approach of the society.

Disabled people are generally accepted as dependent people. Therefore, in the disability politics welfare system is dominant in the disability politics instead of strengthening and encouraging their involvement to social life as equal citizens. In spite of transferred financial resources to employment facilities, built environment, educational provisions etc. and sustained social support, social exclusion and isolation from society have been deepened. When a person takes social support from local agencies, he/she could not struggle for accessibility rights against this responsible agency which are one of the most important social support units in Turkey.

Therefore, there is not any emphasis on social dimension of the disability and the instruments to develop a social perception and integration. Social approach towards the disability should be discussed in all parts of the society immediately. An important point should be arisen a discussion is about state support services which have been caused socio-spatial isolation in the past of the countries (Gleeson, 1999, pp: 139). This issue reminds us the features of state support services encompassed within the scope legislation in Turkey and their debatable effects on disabled people's life. While this process has been experienced through institutionalisation in the UK and Japan, social supports including monetary aids given to disabled people have created long term effects on the isolation of these people.

The space and built environment have got its share with abundance of physical barriers accompanied by social and cultural barriers. The concept of

accessibility has a short background in Turkey also. How disabled people experience adverse effects of the built environment can be demonstrated by Disability Survey's outcomes which reveal that 66.9% of the disabled people on the average are facing disabling barriers in daily life. Lack of environmental arrangements and signage, barriers at the entrances of public buildings and cannot being able to participate in social activities are the difficulties restricting or hindering people with disabilities from accessing the facility and services as equally as other people. All of these are the consequences of inaccessible practices certainly.

The other characteristic of the disability in Turkey is that the rights of disabled people have always been provided by the State. They are not demanded by disabled people's themselves, but introduced by the State unlike in the cases of UK or Japan. After several rights have been deserved and gained, most of them have become disappear in the bureaucratic system. Disabled people cannot exploit and maintain their rights. Accessibility is an important example on this issue. Although there are many enforcements for accessibility, apart from some exceptions of a little and partial implementation most of which are not appropriate for easy, independent and safety mobility.

As declared at the beginning of the chapter, like disability, accessibility is a problematic in Turkey not in theory or legislation but with in practice. All of the issues discussed here affect inaccessibility implementation process surely. But how responsible local agencies perceive and handle the issues of disability and accessibility matter is not clear enough. In these circumstances, an investigation is planned and applied in order to disclose some dimensions of this situation. Next chapter includes this survey.

CHAPTER 5

A SURVEY CONDUCTED IN A DEFINED AREA: LOCAL AGENCIES' POINT OF VIEW ABOUT ACCESSIBILITY AND THEIR WORKS

Disability is described as a socio-spatial experience by Gleeson (1999, pp: 54) and the organisation of basic life activities; for example work, transport, etc. affect this experience to some degree. Attitudes are important for both constructions of self identity and 'biases' as 'materialised through the social practices which society undertakes in order to meet its needs'. By changing attitudes, invisible obstacles could be turned visible and could just be removed by this way (Finland Ministry of Social Affairs and Health, 1996, pp: 10).

Imrie (1996) asserts that planners, architects and building control officers are guilty because they construct spaces which 'lock' people with disability out. It is difficult to clarify the role of planners, architects and other technical staff in creating accessible built environment but the field survey aims to make a start for discussion about standpoints of the persons from mentioned professions.

In this chapter, this survey is presented in detail and in the next chapter findings of this field study is assessed. Since the survey is applied in local agencies and these agencies are working a part of bureaucratic system, bureaucracy theory is also given briefly.

5.1. Aim, Scope and Necessity of the Survey:

There are essential and related legislation and standards about accessibility of people with disabilities in Turkey as mentioned in the previous parts of the study. Furthermore, when the survey is applied, approximately three years passed after the approval of People with Disabilities Act and the duration for improving accessibility in open spaces, public buildings, social and cultural infrastructure areas and public transport started concurrently. However, there have not been adequate and remarkable activities and implementations yet. In this

study, it is planned to bring out the causes of this gap between those two conditions. There is not a sufficient study in Turkey searching this situation; therefore, there is a lack of required information about what should be done in order to go beyond the problems.

This situation is described in the 1st and 2nd Councils of Disabled People, which the former is about “Contemporary Society, Life and Disabled” and the latter is about “Local Governments and Disabled”. In the report prepared during the 1st Council of Disabled People, many barriers obstructing or limiting people in built environment, especially in cities are mentioned. Though the presence of some new public buildings, allocated park areas, some house projects and some public transportation arrangements have some comfortable use, it is stated that they are not relevant to each other (Administration on Disabled People, 1999). In the 2nd Council of Disabled People, likewise, it is emphasised that although Urban Development laws and regulations include several issues, it is not possible to say implementation is realised in expected rate and physical environment exactly converges barrier-free characteristics (Administration on Disabled People, 2005).

The results of 2002 Turkey Disability Survey (2002 Turkey Disability Survey, Detailed Analysis) reveal difficulties faced by disabled people in built environment, as mentioned former chapter of the study. According to the Survey, 68.7% of orthopedically disabled persons, 65% of visually impaired persons, 66.8% of hearing impaired persons, 67.6% of speaking impaired persons and 66.4% of mentally retarded people report that there are not suitable arrangements for his/her disability in built environment.

The other emphasised results are about major problems for people with disability while performing daily activities about lack of environmental arrangements, inability of entering to public buildings, inability of using public vehicles, inability of participating in social and cultural activities, lack of visual signage and alert, and lack of communication facilities.

Local governments plan, design and create built environment in Turkey, as mentioned earlier. The duty and responsibility of providing accessibility is, therefore, belong to these agencies. Most of the local services are planned, designed and implemented by municipalities too. All of these responsibilities and duties of municipalities are defined by the Municipalities Law dated 2005 and numbered 5393 and the Greater Municipality Law dated 2004 and numbered 5216.

In Municipalities Law, provisions for people with disabilities are as following:

According to article 14/5 under the title of Province' duties and responsibilities states that "services of the provinces should be provided at places close to its citizens and by appropriate methods. In service provision, people with disabilities, people with reduced or low income and elders should be taken into consideration. As stated in the article number 38/n, the Mayor is responsible for using the part of the budget allocated to poor and persons in need and directing the services for people with disabilities and establishing centres for them. Social services and aids for people with reduced income, poor, persons in need, destitute and people with disabilities take place in the expenditures of the province (Article 60/i).

In Greater Municipality Law dated 2004, provisions for people with disabilities are as following:

Greater Municipalities have the responsibility to establish parking lots, sport, recreation places and parks; to provide socio-cultural services for elderly, people with disabilities, women and youngsters; to organize vocational courses, to construct health, education and cultural buildings/establishments and to provide their maintenance and repair, to protect cultural, natural and historical heritage, to provide services that aims to improve places and functions that are historically important for the city (Article 7/z/d).

To manage/develop health centres, hospitals, mobile health services and various types of social and cultural services for adults, elderly, people with disabilities, youngsters and children. For this aim to construct or manage social establishments, to organize vocational courses and in the provision of these services cooperate with universities, high schools, public institutions and civil society organizations (sub clause v).

Under the responsibility of county and province municipalities, it is stated that they should provide social and cultural services for elderly, people with disabilities, women, youngsters and children and organize vocational courses for them. According to the article 18 that is about the duties and authority of the Mayor should establish centres for disabled people to support activities regarding disability (sub clause m). 24th article is about the expenditures of Greater Municipalities. Aids and common project expenses devoted to county and province

municipalities affiliated institutions (sub clause c); social services and aids for people with reduced income, poor, persons in need, destitute and people with disabilities are stated in the expenditures of the Greater Municipalities (sub clause j).

In the 2nd Council of Disabled People, several problems were declared by municipalities' representatives and elaborated by participants. Under the title of 'knowledge, technical and financial qualification', technical personnel are reported as insufficient in terms of quantity and professions. Additionally, it is stated that existing ones have low-level of knowledge about what should be done for creating barrier free environment. Financial constraint is also one of the important problems mentioned under this title.

City of Ankara, which is the selected case study area, is covered by the above mentioned two Laws. In this context, Greater Municipality of Ankara and five central county municipalities; Çankaya, Keçiören, Altındağ, Mamak and Yenimahalle are designated in order to apply the survey. Map (Figure 25 *as Appendix B*) shows the duty and responsibility areas of municipalities.

Another determined issue is about departments of municipalities that have to be involved in the study. All of the municipalities' organisations are similar to each other in terms of planning, design, control and practice of built environment studies. When duties and responsibilities of departments are examined, three main Directorates appear relevant. Directorate of Development and City Planning, Directorate of Parks and Landscapes and Directorate of Infrastructure are the main responsible and authorised bodies for the subject. There is one more relevant body named Studies and Projects Directorate, which is only under the Greater Municipality of Ankara's organisation scheme. In addition, studies about parks and landscape areas are carried out by Directorate of Environmental Protection and Control.

Main duties of Directorates of Development and City Planning can be summarised as;

- Planning, propounding and auditing implementation of urban plans at scale of 1/25000 and 1/5000 (for Greater Municipality)
- Planning and propounding of implementation plans at scale of 1/1000 and parcel plans (for Greater Municipality)

- Architectural project approval, building licence and building use licence preparing (for Slum Prevention Areas and Urban Transformation Areas by Greater Municipality)

Main duties of Directorate Environmental Protection and Control of Greater Municipality of Ankara can be summarised as;

- Coordinating green zones allocated in the Municipality's development plan
- Building and repairing the pedestrian areas, playgrounds and sport areas

Main duties of Directorate of Parks and Landscapes can be summarised as;

- Planning, building and management of open green areas, playgrounds
- Planting of streets and sidewalks

Main duties of Directorate of Infrastructure can be summarised as;

- Building and repairing the streets, boulevard and roads
- To carry out signage works
- Building and repairing the pedestrian crossings

Main duties of Directorate of Studies and Projects can be summarised as;

- To carry out all required transactions for the development and implementation of the projects
- Preparing projects which will be implemented by Greater Municipality of Ankara
- Preparing specifications for projects which will be adjudicated
- To control and approve the adjudicated projects

Since some municipalities set up units serving for people with disability, it is decided that the survey should also be applied to there units, and also Directorates in charge of carrying out built environment works.

In the case study, survey is planned to be applied to one authorized/manager and one technical person from each directorate listed above. It is aimed to expose standpoints of both the decision makers and technical personnel about disability, accessibility and accessibility works. Thus, accessibility problems are identified in two different hierarchical levels. Technical personnel are

preferred as city planners, architects and landscape architects, while managers are from several professions, inherently.

5.2. The Questionnaire:

Questionnaire is prepared by the writer of the thesis. The questionnaire is composed of four main parts and total 23 questions (please see for full questionnaire in *Appendix A: Survey Form)*. The questionnaire can be defined as a limited interview as 16 of the 23 questions are open-ended. With this form of questionnaire, it is intended to encourage respondents to put their thought clearly in a detailed way. It is developed and used in the field in Turkish and than translated into English. Conclusions of the survey started to be evaluated after all of the survey is completed.

Before the main part, there is an identification part, including the name of municipality, and duty and profession of the respondent in municipality. If the questionnaire is applied to municipality's unit for people with disability, after the name of the unit, it is asked whether any work is done about built environment and accessibility for people with disability, or not.

As mentioned above, questionnaire is mainly made up of four different parts. First part is about disability and accessibility (8 questions). Basic terms and concepts about disability and accessibility; for instance, concept of disabled, mobility limitation, handicapped and accessibility are asked to the interviewed person. In this part, there are also three more accessibility questions; two of which are needs of people with disability in built environment (open spaces, buildings and public transportation) and arrangements should be done in built environment in order to provide accessibility. Last question is about barriers existing in the municipality's responsibility area.

As service planner and provider, municipalities firstly must be aware of people with disability, then recognise their needs and finally integrate into the process of building environment sometimes with producing special solutions for them. With this point of view, the aim of the first part is to identify knowledge of interviewed persons about disability, people with disability, accessibility, implementations that should be done in built environment and barriers.

Disability and accessibility issue is rather new in Turkey, because of having been in legislation only since 1997. In this period, the issues cannot be

discussed adequately and necessarily as a part of the agenda. Therefore, knowledge level, consciousness and awareness about accessibility and its importance and necessity cannot be understood by related professions yet. This situation affects directly attitudes of professional as individually and as a municipality worker. Likewise, accessibility and other related issues have not sufficiently been a part of professional education yet. Hence, as it is still an unfamiliar field it cannot be expected to be implemented. In the survey, it is planned to disclosure the level of knowledge among municipality personnel and to what extend it effects the works done by municipality.

Second part of the questionnaire is about legislation knowledge brought into force in recent years in Turkey (3 questions). Following determination of municipality personnel's knowledge level about some concepts, their familiarity with "what have to be done under legislative obligation" is aimed to be searched. Three legislative arrangements as laws, regulations and standards including arrangements aiming at providing accessibility for people with disability are asked to personnel.

Third part of the questionnaire is about statistical data of people with disability (3 questions). The purpose is to identify whether the municipality has any statistical and demographic information about number of people with disability, their disability type, ages, gender, education and employment situation, etc. Later, if there is any data, it is asked whether it is mapped, or not. The population structure and location of population is important in terms of planning services and providing necessary conditions.

Forth and the last part of the survey is designed in order to examine municipalities' works for accessibility of people with disability (9 questions). To inquire these works, it is thought that the works should be grouped in two sub groups. Before the questions about the works, the respondents are asked whether the project proposals subject to accessibility for people with disability are accepted within municipality, or not. If the answer is "no", reasons of this rejection are asked.

After these questions, the first sub part about special works is started to be examined. The respondents are asked if there is any special work; like planning, arrangement, application or other in order to provide accessibility for people with disability. If it has been done, some detailed information as subject, content and measures of the work, and status of the proposal; if it is remain as

thought, done or applied are requested. The next question aims to determine the reasons of not implementing the works or not doing any special work. In this question, respondent is provided with 12 alternative answers including different issues and one more option as “other”.

Second sub part is about the works done routinely. It is asked whether the needs of people with disability are considered in development plans, urban designs, landscape architecture projects or other works done by municipality. If this question is answered affirmative, the attribution of plans, projects and works considering accessibility measures and needs of people with disability is asked. Then, the manner of principles included in these plans, projects and works are claimed. With the last question, it is aimed to identify the reasons of ignoring the needs of people with disability in plans, projects and works. In this question, respondent is provided with 17 optional answers and “other” option again.

5.3. The Field Study

The field study is conducted in Ankara, in defined municipalities as Greater Municipality of Ankara, Çankaya Municipality, Keçiören Municipality, Mamak Municipality, Altındağ Municipality and Yenimahalle Municipality, as it was mentioned formerly. The survey is carried out between the date of 20th of August 2007 and 18th of January 2008 with face-to-face interviews by the writer of the thesis. In some cases, respondents need to have a little extra information about the questions especially for the concepts in the first part of the questionnaire.

The survey, on the other hand, is intended to be applied through Directorate of Development and City Planning, Directorate of Parks and Landscapes and Directorate of Infrastructure as the main responsible and authorised bodies for providing accessibility. However, while the survey is being carried out, one alteration has to be done because of being confronted with an unexpected case. Authorised person of a directorate rejected to respond the survey, and then alternative directorate was included into the survey. While this is recorded as background information for the field study, questionnaire is filled in by Directorate of Studies and Projects in Greater Municipality of Ankara. On the other hand, within one of the municipalities, studies about parks and landscape areas are carried out by Directorate of Environmental Protection and Control, as different from other municipalities.

In these departments, listed above, one authority and one technical person are interviewed face to face. Technical personnel are selected from three specific professions as city planners, architectures and landscape architectures. 40 interviews are completed, 34 of which are technical departments and 6 are disability units of municipalities. The preferred respondent for the interview is the director of the selected directorate. But if this is not possible, the questionnaire is applied to the selected relevant assistant director working under the main directorate. For only one case, questionnaire has to be applied to a chief of the directorate. These assistant directors are selected from building project licence, urban developments planning, and construction of infrastructure and construction control directorates. In conclusion, 7 directors, 9 assistant directors and a chief are interviewed. Since two of the directorates are working under the same directorate in one of the municipalities, only one authorised person is interviewed. On the other hand, the aimed number of technical person cannot be completed, as there is no technical person in one of the directorate.

In the field study of technical directorates, the survey is applied to 12 architects, 3 city planners and 8 landscape architects, which can be seen at Figure 1. Among these professionals, 4 architects, 1 city planner and 1 landscape architect are interviewed as authorised persons. In addition to these professionals, 5 civil engineers, 2 agriculture engineers, 1 public administrator, 2 electric and electronic engineers and 1 mechanical engineer have also been included in the survey as authorised persons (In Figure 3).

In Greater Municipality of Ankara, 4 architects, 1 landscape architect and 1 electric and electronic engineer are interviewed. In Çankaya Municipality, 2 architects, 1 city planner, 2 landscape architects and 1 agriculture engineer are interviewed. While in Keçiören Municipality 1 architect, 2 landscape architects and 2 agriculture engineers are included in the survey, in Mamak Municipality 2 architects, 1 city planner, 1 landscape architect and 1 agriculture engineer are interviewed. Besides, in Altındağ Municipality, 2 architects, 1 landscape architect, 2 civil engineers and 1 public administration, and in Yenimahalle Municipality 1 architect, 1 city planner, 1 landscape architect, 1 civil engineer, 1 mechanical engineer and 1 electric and electronic engineer are interviewed. As mentioned before, apart from chosen professions, others are professions of authorised persons.

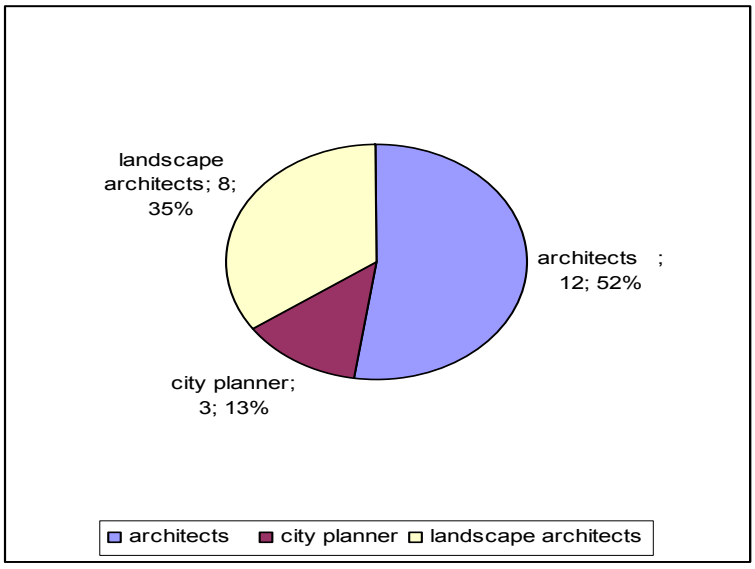

Figure 3: Distribution of technical personnel's professions

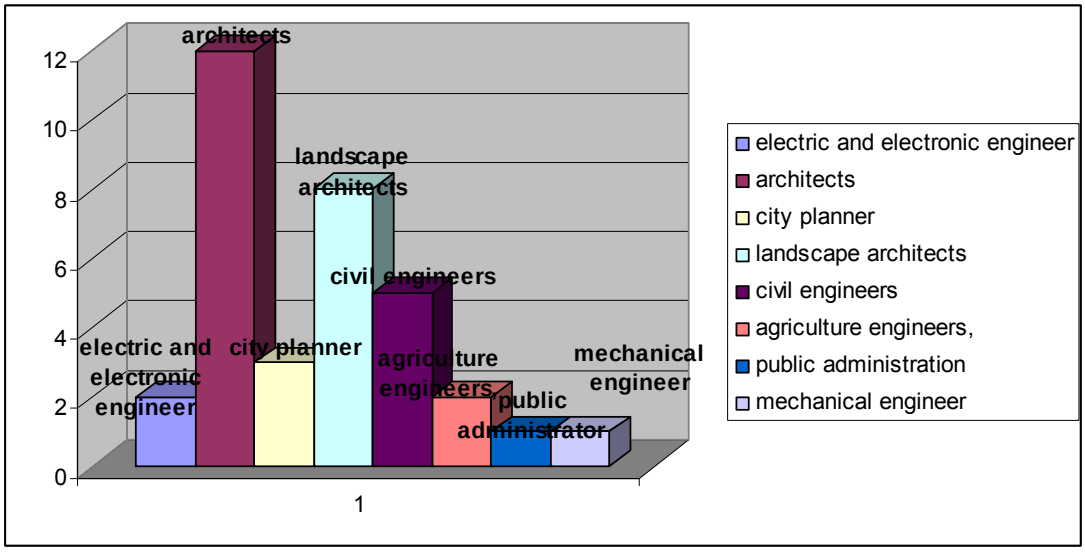

Figure 4: Distribution of respondents' professions

In disability units, 1 authorised and 1 other personnel are preferred as respondents. Only Greater Municipality of Ankara, Çankaya Municipality, and Keçiören Municipality have distinct disability units called different from each other. The questionnaire is applied some different from technical departments there. While the name of the unit is filled before questions, it is asked that whether any

work is made about built environment and accessibility for people with disability or not. Last 4 questions, on the other hand, are not applied to these unit because of they are related to routine technical works of municipalities.

6 interviews are made in units. Along the survey made in these units, 2 unit directors and 1 assistant coordinator are interviewed as authorised people. 2 social workers and 4 civil servants are applied the questionnaire.

As the field study observations made by the writer, some important experiences give some clues. Most of the authorised persons, some of who hesitated for a short time after had learnt the subject, accepted to participate the survey, except for the example given before. Technical persons, on the other hand, much more hesitated than authorised persons; especially ones work as contracted personnel. Other situation often faced is about respondents' suspicious in terms of how they answer the questions, as a personnel of the municipality or as individual. Some of them declared that they can only answer individually, which does not constitute a problem for the study that inspecting standpoint of the person individually anyway.

5.4. Evaluation of the Survey

After applications of questionnaire have been completed, evaluation of the interviews has been made. The questionnaires applied to technical departments and units serving for people with disability have been evaluated separately and then they interpreted together.

Moreover, all of the terms, concepts and statements in the respondents' answers are evaluated and put into a category not to give rise to remain any missing information, Additionally, how many times statements are mentioned is written at the end of the clauses and charts are given in order to understand the results more easily.

5.4.1. Evaluation of the Survey Applied to Technical Departments

PART I. DISABILITY AND ACCESSIBILITY

Question 1: What do you think about disabled, please define?

It is thought that before answers are examined, disability and being disabled must be defined. There are two main approaches to disability, medical and social models, which mentioned recent parts of the study. In order to remind,

firstly, in medical model disability is elaborated by individually and some concepts are used to define disability; for instance, bodily abnormality, disorder, deficiency, functional incapacity, and like. Moreover, person with disability are taken up as a person who needs 'care and attention' and dependent on others (Barnes et all., 1999, pp: 21).

The other approach is called social model of disability, and in this model, disability is created by society thus solutions are in society. In this manner, disability is constructed socially and imposed on people with impairments. Many obstacles; for example, physical inaccessibility, limited access to communication, negative attitudes are the barriers for people with disability in order to realise their desired roles and full integration into society (Barnes and Mercer, 1997; cited in Gilson and Depoy, 2000, pp: 208).

The definition of disability is given by WHO as 'any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a person' (1982), which is included in the medical approach. While the definition is based on 'one's ability to carry out normal day-to-day activities' in Disability Discrimination Act of United Kingdom, there are different definitions in different Acts in Japan. On the other hand, Turkish People with Disabilities Act also gives the definition; 'disabled is the person who has difficulties in adapting to the social life and in meeting daily needs due to the loss of physical, mental, psychological, sensory and social capabilities at various levels by birth or by any reason thereafter and therefore who need protection, care, rehabilitation, consultancy and support services'. This definition is mostly prepared according to medical model.

All of the people interviewed answer this question. The answers can be categorised as;

1. person with organ or body deficiency/impairment (8 times)
2. person who is different from other (normal) people according to perform daily activities (5 times)
3. person who cannot use some organs/body functions (4 times)
4. person who cannot meet/is in difficulty meeting his/her needs (4 times)
5. different disability groups are given as definition (4 times)
6. person who need to assistant devices/other people's help (3 times)

7. person who is different from other (normal) people owing to incapacity (2 times)
8. in a social manner, the person is paid insufficient attention (2 times)
9. others

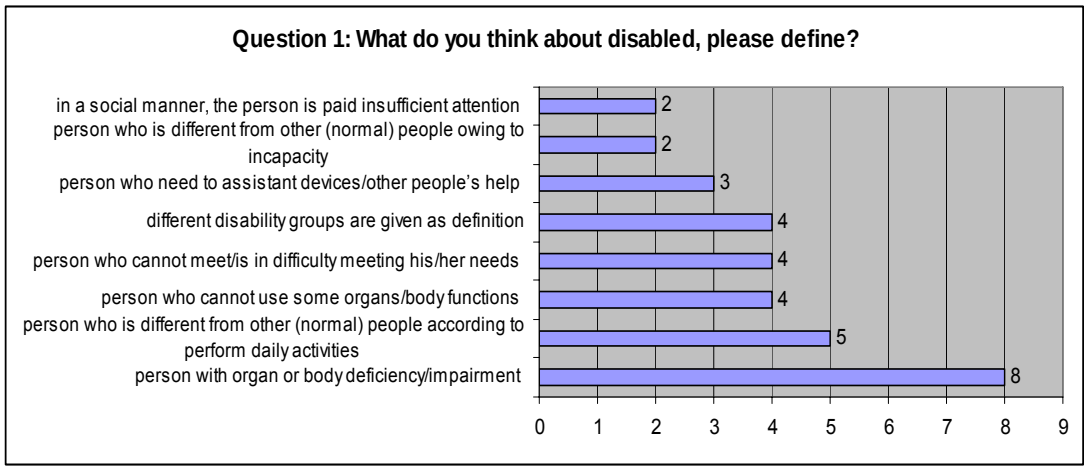

Figure 5: Definition of disabled people

It is seen that, disability is defined, in terms of medical approach of disability in majority of questionnaire with some complicated comments. 'Difference' and 'inability' are the mostly mentioned concepts related to disability/people with disability matter. 'Difference', especially, is given with and organ or body deficiency or impairment. The other way of explaining difference is that making comparison between normal people and disabled person. The daily activities are used as criteria in this comparison. One more difference from other (normal) people is about incapacity of people with disability. 'Inability' is mentioned in terms of meeting needs and people with disability are considered as unable person in this manner.

Following these answers, needing help is seen by respondents as the other important characteristic of disability and this help is described in two different ways as help of assistant devices and of other people. Apart from organ and body deficiency or impairment, ability of using organs or body functions is other criteria according to respondents.

On the other hand, some respondents give simple disability groups as answer of this question; for example bodily and mentally impaired people, spastic people, or people with orthopaedic (arm, hand deficiency) or physical deficiency.

Only two answers take on social dimension are; ‘disabled is the person who is not paid sufficient attention in society’ and ‘when disabled is said, insufficient physical arrangements are thought’. Because of different explanation, they gain importance in the survey.

Apart from these two explanations, term of ‘disabled’ reminds all of the respondents of medical tackling of disability matter and individualistic approach through an impairment matter. By municipality personnel working and managing in technical departments that design and create majority of built environment and provide urban services, being disabled should not be perceived as a dependent, incapable and unable situation. Only in this way, technical personnel and authorised people can make necessary environmental improvements in order to realise accessibility.

Question 2: How many disability groups are there, please list?

Disability varies according to several criteria like severity of disability, limitation of or difficulty in many activities, and deficiency or impairment of an organ.

There are four main disability groups which are important for defining the situation of people with disability and understanding their needs in order to access and use built environment comfortably and independently. These groups are; people with orthopaedic disabled, people with visually impaired, people with hearing and speech impairment and people with mentally retarded. In order to identify the needs of people in built environment, sub groups of each main group are also being known in details due to variety of accessibility requirements. For instance, while blind people need audible signage and tactile equipment for orientation in built environment, limited sight people need contrast colours and large prints.

Mental health illness and other chronic illnesses can be listed as two more disability groups; however, their needs in built environment should be evaluated under the four main groups mentioned before.

All of the respondents put forward an idea about the question. The answers can be categorised as;

1. people with visually impaired (14 times)
2. ‘bodily or mentally disabled’ people (13 times)
3. people with orthopaedic disability (12 times)
4. people with hearing and speech impairment (9 times)
5. mentally retarded people (7 times)
6. people with mental health illness (4 times)
7. people with chronic illnesses (4 times)
8. people with walking limitation (3 times)
9. different special disability groups are given; like spastics or down (3 times)
10. others (for example; capable of mobility or not, maintain his/her own life or not, and capable of compensate his/her disability when necessary conditions are provided, or not)

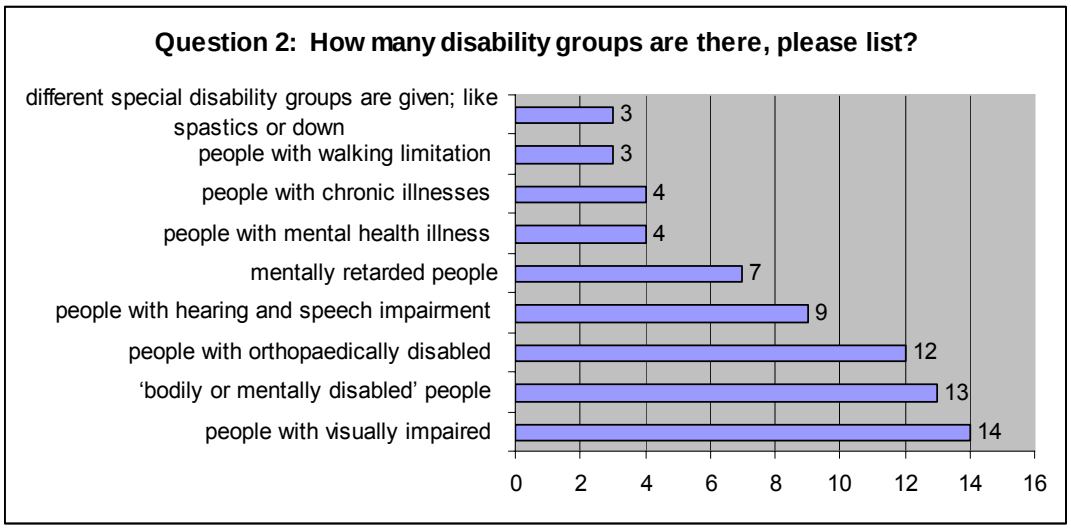

Figure 6: Disability groups

According to the answers, approximately half of the respondents mention visually impaired people as one of the disability groups. Correspondingly, orthopaedic disability is thought by 12 people who asked to group people with disability while other two main disability groups; hearing and speech disability and mentally retarded people are known by fewer people. Not surprisingly, visual and orthopaedic disabilities are known as disability group much more, since its most forms are more visible than other disability groups. Similarly walking limitation is

other related group to orthopaedic disability as a sub-group, which is given by 3 people in the survey.

On the other hand, the answer of ‘bodily or mentally disabled’ must be grouped as a full statement separately because of their mention frequency as by 13 people. With this answer, about half of the respondents prefer to gather different disability groups only into two groups. As a consequence, people do not know main disability groups, so it means that they cannot know their needs in built environment and cannot envisaged accessibility in the works. Besides, ‘capable of mobility or not’, ‘maintain his/her own life or not’, and ‘capable of compensate his/her disability when necessary conditions are provided, or not’ are the other groupings that it is not possible to expose the requirements of people within these groups in detail.

Consequently, main disability groups, on account of sub-groups are not known sufficiently by personnel working in technical departments.

Question 3: What is mobility limitation? Who is involved in this group?

This question consists of two parts. At first, definition of ‘mobility limitation’ is required. The definition is given before; mobility limited people may experience certain difficulties in built environment when they face with barriers or when they cannot facilitate with demanded additional equipment and accordingly they are limited in terms of mobilisation.

In the survey, this part of the question is answered by 25 people of total 34 and these categories appear as;

1. Incapability of making things or action which should be done or which are wanted to do, done by other people (15 times)
2. Illness, body defect or functional deficiency cause (3 times)
3. Physical reduction in social and work life (2 times)
4. Others (mobility slowness, incapacity of transformation of thinking and emotion)

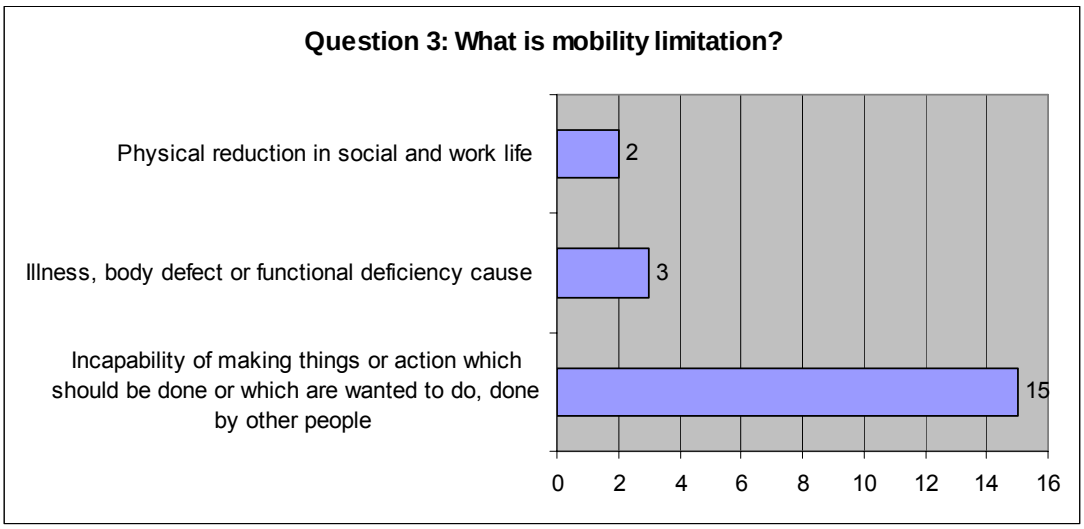

Figure 7: Definition of mobility limitation

The answers can be grouped under three main topics. The first topic is about 'incapacity condition'. 'Incapability of making things or action, as a whole or partly, which should be done, wanted to do or done by other (normal) people' is thought as a mobility limitation by 15 of 34 persons. In these answers, difficulties are mentioned; however, their reasons are given connected to 'incapability'. Barriers or unsuitable arrangements are not thought, thus it is possible they are not known, at least in this extent.

The next topic is about reduction in some functions like seeing, hearing, thinking or bodily or mentally limitation is given by 4 persons in the frame of this question. Some of the answers give only causes of mobility limitation as alone or related to deficiency, as third topic. These causes are illness, bodily defectiveness or functional deficiency.

That is to say, mobility limitation is the situation that is seen as a problem sourced by people's experiences in conclusion of the survey. The environment conditions are not evaluated as reasons and part of this problem in all of the answers.

Second level of the question is about people who experience mobility limitation. As listed before, people with disability, elderly people, pregnant women, children, people using pusets, people carry luggage, too long or short people, too fat people are involved in mobility limited people. There are 25 answers.

1. people with disability (6 times)

2. visually impaired people(6 times)
3. elderly people (6 times)
4. people have organ deficiency (5 times)
5. people with physical and mental health illnesses (or mental retarded) (5 times)
6. children (4 times)
7. people with hearing and speech disability (3 times)
8. people with orthopaedic disability (3 times)
9. people being incapable of walking (3 times)
10. people have chronic illnesses (2 times)
11. all of the people (2 times)
12. other

Mobility limitation is considered as related to people with disability by most of the respondents. While 6 people answer as people with disability as a general, others give disability groups; for instance, visually impaired people, people with physical and mental health illnesses, people with hearing and speech disability, people with orthopaedic disability people, people being incapable of walking and people have chronic illnesses. As a result, mobility limitation matter is seen as a disability problem or situation by 19 persons and is mentioned 33 times.

Other mobility limited groups, elderly people and children are also given by respondents (10 totally). In spite of this, they are not sufficient in terms of the concept of mobility limitation. It means that, it is not known sufficiently that majority of the people may have mobility limitation in different ways and benefit from accessible arrangement in built environment, thus accessibility is related to not only people with disability but also important part of the society.

Question 4: Who is handicapped, please define?

This question takes crucial importance for the survey, because people from specific professions and work about built environment must know the difference between disabled and handicapped.

While it is used instead of disabled remark, the concept of handicapped is different from disabled in several manners. It can be seen as a situation which comes into being in continuity of disability in a process. When a person with disability faces with a social, cultural or physical barrier and affect in a negative manner from this situation, he/she becomes also handicapped. The definition of the handicapped is ‘a disadvantage for a person, resulting from impairment or a

disability that limits or prevents the fulfilment of a role, depending on age, sex, social and cultural factors) that is normal for that person'. To put it in a different way, handicap refers to the limitation experienced people with disabilities in their interactions with their societies (WHO, 1982). Furthermore, in Standard Rules for the Equalisation of Opportunities for Persons with Disabilities, handicapped definition emphasises that 'the focus on the shortcomings in the built environment and in many organised activities in society; for example, information, communication and education, which prevent persons with disabilities from participating on equal terms'.

All of the people participating to the survey answer to the question. They can be grouped as;

1. the people having incapability and inability for a function/action (9 times)
2. disabled people (8 times)
3. a situation caused by physical and social barriers (5 times)
4. the people having mobility limitation (3 times)
5. the people cannot use some organs (2 times)
6. other

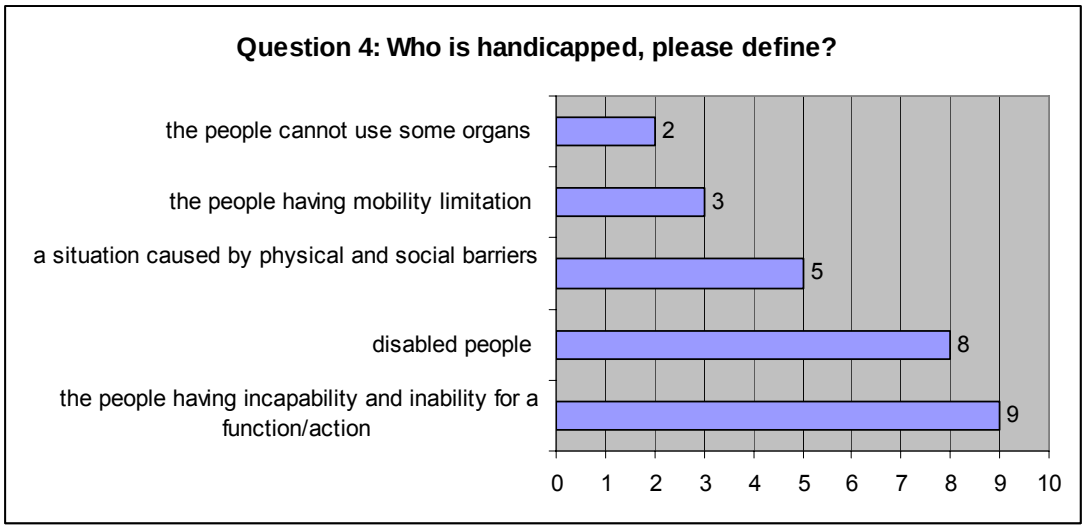

Figure 8: Definition of handicapped

Handicapped is mostly evaluated by interviewed technical persons as a disabled. While only 'disabled people' answer is given by 8 people, 'incapability

and inability' condition is given by 9 persons. Moreover, mobility limitation and the answer of 'cannot being use a/some organ(s)' are thought connected with handicapped.

On the other hand, only 5 persons (3 of authorised and 2 of technical personnel, 2 are architects, 1 is landscape architect, 1 is agriculture engineer and 1 is civil engineer) mention handicapped is originated from physical and social barriers. This is an important output for the survey. As a result of a few meaningful answers, it is obvious that the concept of 'handicapped' is not known and interpreted by technical people from specific profession.

Question 5: What are the needs of people with disability in the built environment, please list?

While asking this question, built environment is explained as all of the open spaces, buildings and public transportation systems, briefly the environment created by mankind.

Freund (2001, pp: 690) gives examples of some disability groups as a middle aged woman with chronic rheumatoid arthritis, an old man with senile dementia and a young man in a wheelchair because of a spinal cord injury and asserts that they have very different interests, desires, wishes and needs.

Being the first question about accessibility is the importance of this question. If the society does not provide necessary conditions for demands caused by differences, people with disability will not be able to participate to society and activities there. In fact, it is aimed to find out what personnel think about needs of people with disability in built environment, not what should be done for accessibility. In spite of having some common needs, each disability group require different facility, signage, equipment, arrangement and implementation in built environment, as mentioned before. Even each sub group needs separate accommodate necessities because of their different mobility ability. For example; the person use wheelchair, need suitable manoeuvre and circulation space, even if he/she can move with companion, different measures are required. Other orthopaedic disabled people, like people having arm or hand deficiency need to grasp easily and use all of the equipments with less effort.

So that, in this question approach should be in terms of disability groups and their needs.

All of the people interviewed answer the question. The answers can be grouped as;

1. People with disability should use and facilitate public spaces/social facilities (15 times)
2. Open spaces; a. sidewalks (11 times)
   b. ramps (5 times)
   c. urban furniture (5 times)
   d. additional equipments (4 times)
   e. over-crossing (2 times)
   f. other (planting, parked cars)
3. Buildings; a. elevator (7 times)
   b. building entrance arrangements (7 times)
   c. WCs (3 times)
   d. other (park area, public buildings, home units)
4. Public transport (4 times)
   a. vehicles (11 times)
5. Answers according to disability groups (7 times)
6. Other

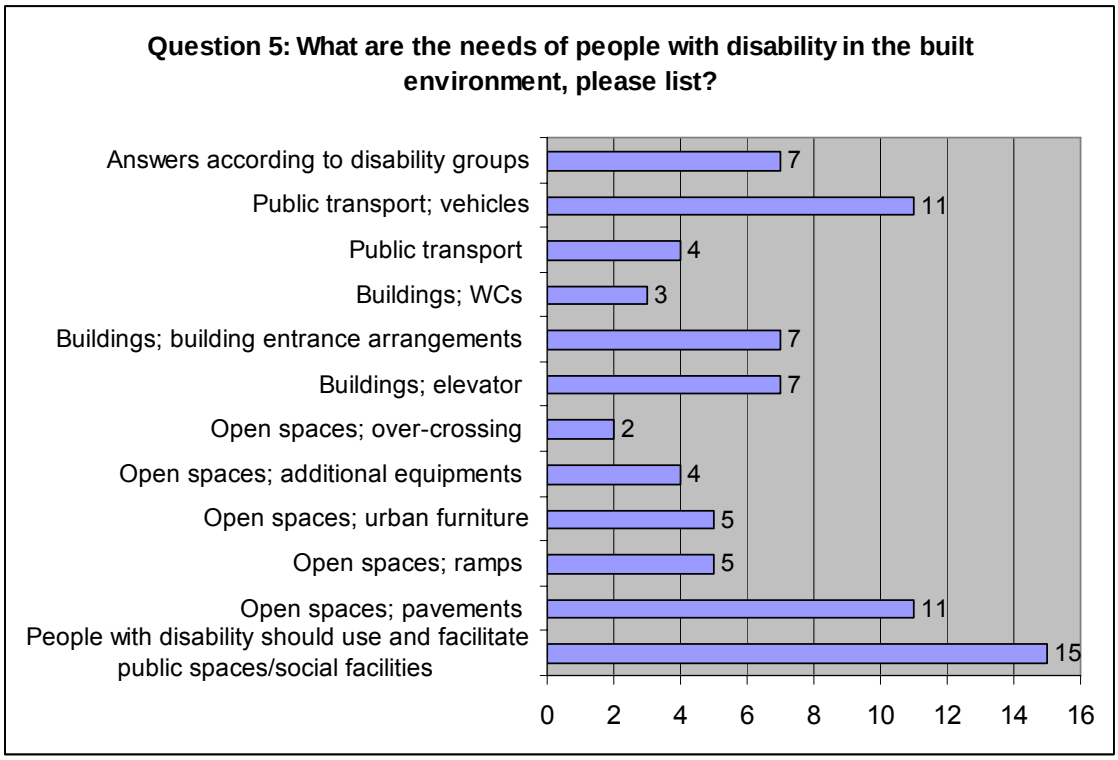

Figure 9: Needs of people with disabilities in the built environment

The answers can be examined according to three groups of different approaches. First group emphasises public space and its use. Several public spaces; like recreation areas, playgrounds and open green areas are given and they should be access and use by people with disability is declared. This can be evaluated as the title of planning and urban service problem, to which most of the answers are related. Second group is about suitable arrangements in open areas, buildings and public transport. 59 different arrangements are given by municipality personnel as the needs of people with disability. These two kinds of explanation both show that there is confusion between two concepts; people with disability need some arrangements in built environment and these guides what must be done for comfortable and easy use.

The third and last group of answers includes remarks related to people with disability and their needs as 7 answers. Although some parts of these answers refer to what must be done, different disability groups are considered mainly in this group. Most of the answers in this group are about people with orthopaedic disability and give needs of people, who use wheelchair or is

ambulant (can walking), in contrast with visually impaired people are given as a disability group by more respondents than other groups. When the respondents of the last group are examined, it is seen that 3 of them are authorised people and 4 are technical ones, and most of them are architects.

Question 6: What is accessibility, please define?

In planning for disabled people in New Osbaldwick according to DDA, the seven foundations of independent living are listed as, accessible information, accessible environment, suitable housing, peer support and personal assistance, accessible transport, equipment and adaptations. In this study, it is also emphasised that the perspectives of disabled people have to be recognised and explicitly considered as part of the process. The design has to take account of the need for regular inspection and for remedial action for relating to this (Shaw et al., 2002, pp: 7).

Accessibility can be defined as 'reaching and using *everywhere* and any service desired *independently* by *everybody'*. In this definition, the concepts; 'everybody', 'everywhere', 'independency' and 'both of reaching and using there' are important. If the built environment let everybody enter, exit, circulate, access and utilise all of the facilities and equipments, it can be called accessible.

It is not expected to get correct and full definition for the question, but conceptual point of view is important.

There are 26 answers of total 34 ones;

1. Suitable building and route in terms of permission for access and usability (7 times)
2. Access from one place to another (6 times)
3. Access to every service, buildings, environments and everything (3 times)
4. Can being maintain life (2 times)
5. Access by him/herself independently, not being in need help to other (1 time)
6. other (capability, providing with needs, communication)

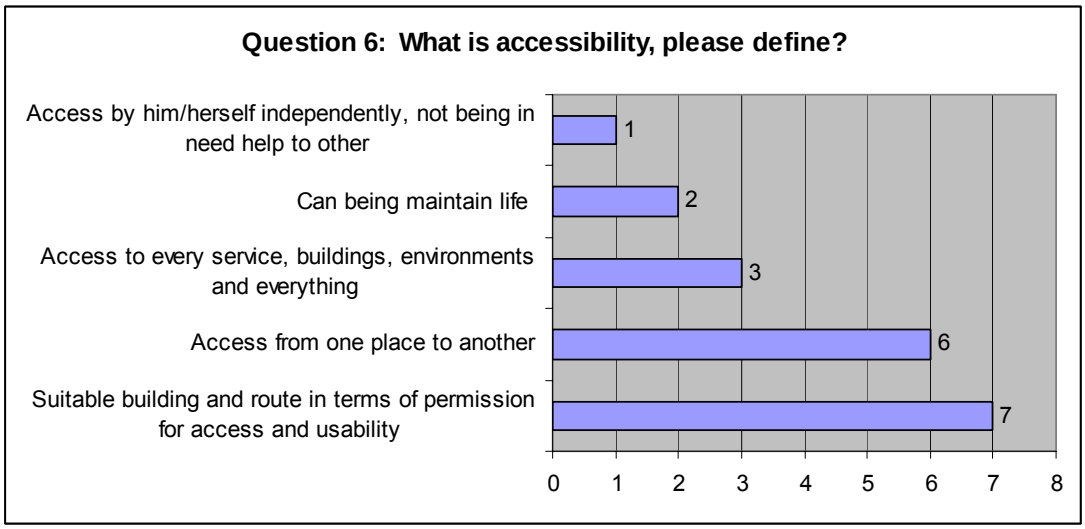

Figure 10: Definition of accessibility

If different answers of different respondents are combined, the definition could be completed because answers remain one-dimensional. While 7 answers include both of access and usability, importance of access to every services, buildings and environments are given by other 3 people. In first answers, accessible features of the buildings and routes are emphasised, which is an important part of the definition actually. These answers come from 4 authorised people and 3 from technical personnel.

On the other hand, only one architect mentions independency in this context as a crucial concept.

Besides, 6 answers are about 'access from one place to another'. Although this statement includes mobility and movement, being able to move through spaces unimpeded by physical objects (Imrie, 2000 (a); pp: 1647) should be emphasised with this statement in terms of accessibility manner.

Question 7: What kind of arrangements should be made in built environment in order to provide accessibility? (a. in open spaces, b. in buildings and c. in public transportation vehicles and systems)

According to Imrie (2000 (a), pp: 1653), people with disability seek to assert their self-defined needs in relation to their claim as having equal right of opportunity in moving from one place to another.

The accessibility must be taken up in four components of built environment as open spaces, buildings, transportation and information. In many sources, the accessibility is described as a chain and it is often asserted that 'if accessibility cannot be provided one of these fields, the chain is broken and we cannot claim that accessibility is provided'. From this point of view, three of the four fields of built environment are included in the survey. Because the last field is thought as unfamiliar for technical professions, a distinct part is not placed in questionnaire. In spite of this, in some answers information is given as an arrangement subject must be in accessible form.

For this question, there are 30 answers about open spaces, 26 answers about buildings, and 24 answers about public transportation vehicles and systems. When different statements are gathered under three titles, the list can be given as;

1. Open spaces; a. ramps (14 times)
   b. sidewalks (11 times)
   c. arrangements in open public spaces (8 times)
   d. signage/map (7 times)
   e. suitable urban furniture (4 times)
   f. elevator on over-crossing (3 times)
   g. handrails (3 times)
   h. distinct special routes for people with disability (2 times)
   i. other (WC, escalator)
2. Buildings; a. elevators (20 times)
   b. building entrance ramps (14 times)
   c. suitable WCs (8 times)
   d. suitable door width (4 times)
   e. handrails (2 times)
   f. stairlifts (2 times)
   g. audible/visual equipments (2 times)
   h. other (not using threshold, suitable wet space)
3. Public transport and system
   a. arrangements for boarding the vehicles (11 times)

b. suitable vehicles (only buses are mentioned for 2 times as the transport mode) (6 times)

c. infrastructure arrangements (bus stops and metro station) (6 times)

d. bus lifts (5 times)

e. special services for people with disability (4 times)

f. other

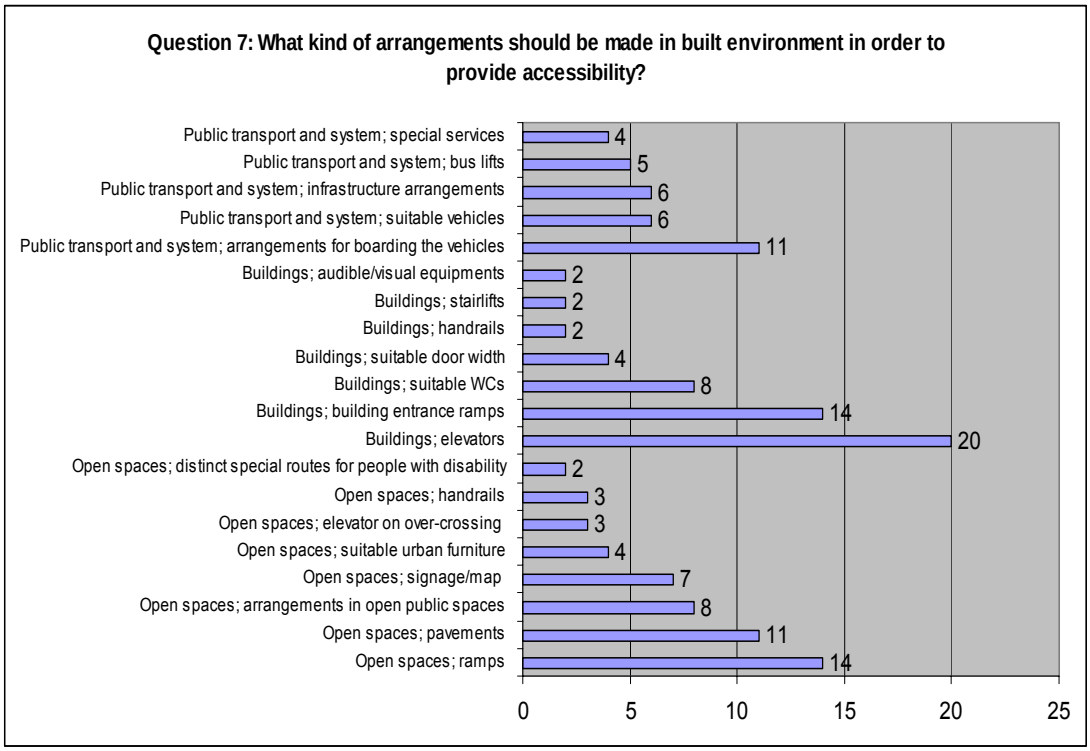

Figure 11: Accessibility arrangements in the built environment

When the answers are examined, most of the arrangements must exist are seen in list above. However, their mention rate remain rather low as it may be expected that all of the respondents who tackle built environment say ramp and elevator as an arrangement for accessibility, although the ramp is argued by Lifchez (1987, pp: 33) as an inadequate solution itself alone. But it could not be denied that the ramp is a symbol of access, too. Thus, this symbol is given an answer only by 14 respondents in the survey. In open spaces, sidewalks and publicly used areas are mostly given answers.

For buildings, elevator is the most famous arrangement in all of the answers (20 times). Ramps is the other familiar design component for buildings too. Besides, suitable toilet is mentioned by 8 persons.

In public transport system, boarding to the vehicle is seen as the most important problem and arrangement necessity is given by 11 persons. Suitable vehicles and infrastructure arrangements are thought by 6 persons at the same rate.

All of the areas, respondents talk about some additional or technical arrangements too. For open areas, signage or map, for buildings audible or visual equipment and stair lift, and for public transport bus lifts are given special equipment for people with disabilities, in spite of being low rate.

Some more special arrangements are given by respondents; however, they appear as exclusionary and isolated arrangements. For open spaces, 2 persons want to distinct routes and for public transport 4 persons find special services acceptable instead of all of the system.

Question 8: What are the most important barriers for accessibility of people with disability in your municipality boundaries? (Please list according to their importance)

The last question of the first part is about physical/architectural barriers, which limit or impede completely people with disability in built environment. One of the most important requirements for accessible or barrier-free environments is to identify present barriers and then remove or improve them. For this reason, technical personnel of municipalities must be aware of and know barriers in built environment adequately. The aims of this question are to determine which barriers are familiar and known or which implementations are seen as barriers by municipality personnel and to compare the barriers declared and works made by municipality.

The barriers given by respondents can be grouped as;

1. Barriers about sidewalk; as general ‘sidewalks’ (6 times), design and positioning of urban furniture on sidewalks (4 times), ramps (not exist or not suitable) (3 times) narrowness of sidewalk (2 times), sidewalks are too height (2 times), used materials (2 times), unsuitable arrangements (2 times), parked cars and unsuitable crossings; (23 times total)

2. Public transport; unsuitable vehicles (7 times), unsuitable bus stops, metro and as general public transport(10 times total)
3. Buildings; unsuitable entrances (5 times), as general 'buildings', unsuitable WCs (8 times total)
4. Topography (4 times)
5. Mentality and unconsciousness (5 times)
6. Low level knowledge of managers (3 times)
7. Planning and urban problems (3 times)
8. Traffic (2 times)
9. Other (standardisation absence, standard absence, over-crossings, financial problems, institutions insufficient)

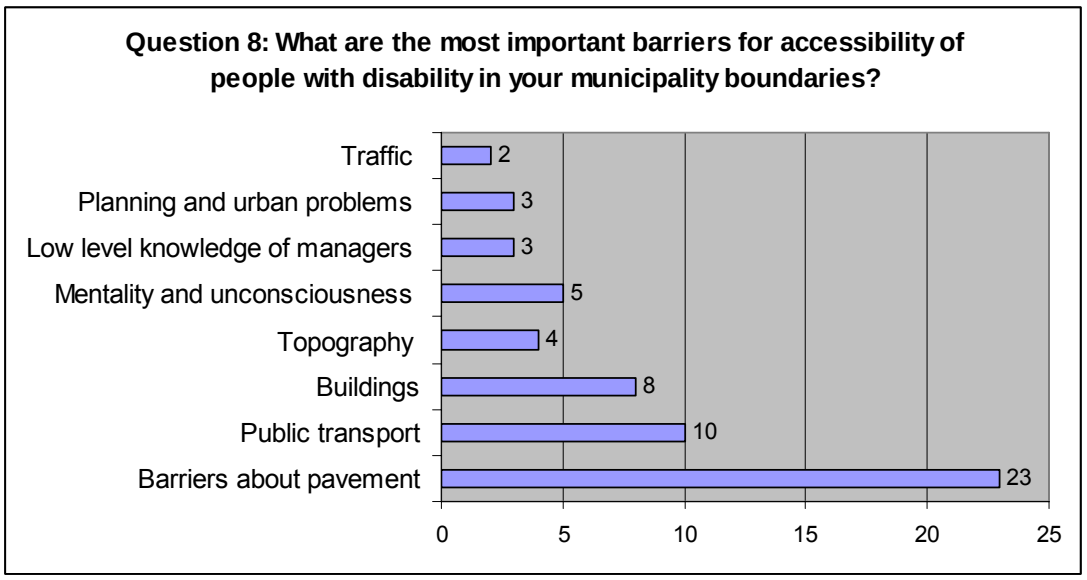

Figure 12: Barriers in the municipality's responsibility area

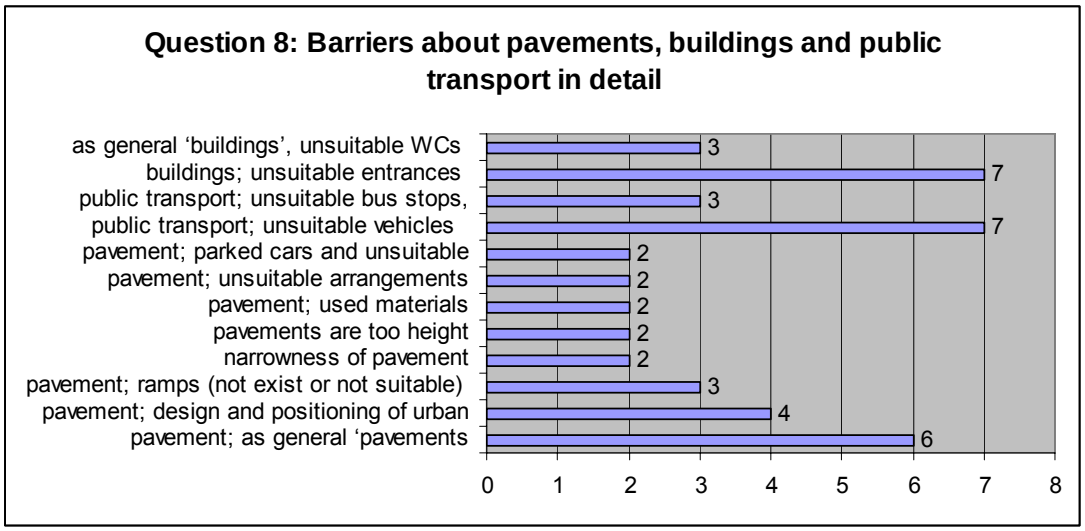

Figure 13: Barriers in detail

As a consequence of answers, three group barriers are given by respondents as existing in municipality boundaries. First group is about barriers in built environment. Over half of the respondents mention sidewalks, their height, narrowness, parked cars, materials used and urban furniture or other infrastructure products; for instance commercial boards, electrical infrastructure, traffic signals and barriers for car parking etc. In addition, 'there is not sufficient pedestrian area' or 'existing pedestrian areas are not suitable' are given other answers. The ramps on sidewalks are mentioned only 2 times. First group continues with barriers about public transport. While unsuitable vehicles are given by 7 people, implementations of public transport infrastructure are little mentioned as barriers. The barriers in buildings, specifically unsuitable entrances, are given less than other built environment barriers.

The barriers in open areas are the subject of Directorate of Infrastructure in municipalities. However, questionnaires are examined in detail; only 2 of 6 municipalities' authorised and technical personnel working in this Directorate mention the barriers. These formed 6 of 23 total mentions. Nevertheless, their answers are limited in general statements, like 'there are insufficient arrangements in streets and sidewalks' or 'unsuitable placement of urban furniture'.

There is one more interesting point that 4 persons give the answer 'there is no barrier' for this question, all of whom are authorised, which is in contradiction

with data of Disability Survey and present condition of city of Ankara. Other answers in the survey, in fact, respond this contradictory position, too.

Like this explanation, it is valid for barriers exist in buildings. As mentioned before, Directorates of Development and City Planning are responsible for architectural project approval, building licence and building use licence. Consequently, barrier-free buildings are in the field of these directorates. However, all of the 8 answers about barriers in buildings are given by other two directories personnel.

The barriers in second group are related to awareness and knowledge about the subject, which is reconciled with barriers in built environment by respondents. 'The barriers are in mind' as a classical statement implicating unconsciousness in Turkey is given a place in the extent of the question. Similarly, low level knowledge of managers is given as a barrier, too. The unconsciousness is emphasised by 2 technical and 2 authorised persons who complain about knowledge level of managers interestingly.

The last group barriers appear related to planning and give some important findings for the survey, because of including local problems. 'In old and unlicensed constructed settlement areas, life standard is low anyway', 'planning and construction works are still going on' and 'construction continue rapidly because of being slum settlement area, accordingly accessible arrangements are not demanded as obligations by the municipality' are the answers given in this context. The local negative conditions of responsibility and duty area of the municipality and their negative effects on works and activities carried out by the municipality can be declared as one of the most important components of accessibility.

PART II. LEGISLATION

*Question 9: Which **laws** do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?*

In Turkey, there are several legislative arrangements about accessibility, as given former part of the study. In spite of being effect for over ten years, this legislation is not known, used and implemented necessarily by municipalities.

Urban Development Act's (No: 3194), additional article about accessibility obliges to conform to relevant standards of Turkish Standards

Institution in development plans and urban, social and technical infrastructure and buildings in order to provide built environment accessible and liveable for people with disability.

The other legislation about accessibility is the Law of People with Disabilities numbered 5378, which includes two articles about accessibility. While first article forces existing official buildings of the public institutions and organizations, all existing road, sidewalk, pedestrian crossing, open and green areas, sporting areas and similar social and cultural infrastructure areas and all kinds of structures built by the natural and legal persons serving to public shall be brought to suitable condition for the accessibility of the disabled people until year of 1012, other article, obliges Greater Municipalities and municipalities to take the necessary measure to make sure that the mass transport services in the city provided or controlled by themselves shall be brought to suitable condition for the accessibility of the disabled people until the year of 2012 too.

The same Law includes a revision of the Flat Ownership Law that project amendment about disabled people's needs can be decided by the majority of number and land share after being discussed in the meeting to be held latest within three months by the unit owners. In contrary, disabled person wanting project amendment can submit the application to concerned authorities which has to establish a commission in order to evaluate the submission.

In spite of being several laws, there are a few answers for this question;

1. Urban Development Law numbered 3194 (related article is not given) (4 times)
2. People with Disabilities Act numbered 5378 (1 time)
3. Other (Building Control Act)

According to the answers, respondents do not know legislative arrangements for accessibility; even they have not any opinion about the matter. Apart from 6 persons whose answers are not sufficient for the question absolutely, rest of the respondents give the answer 'no'.

Question 10: Which **regulations** *do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?*

Ministry of Public Works and Settlements amended related 6 regulations in order to provide accessibility and needs of people with disability in built environment in 1999. These amended regulations are;

- Municipalities Standard Building Regulation
- Urban Development Regulation of Non-planned Areas
- Regulation of Principles for Planning
- Application Regulation of Law of Slum Areas
- Regulation of Car Parking Areas
- Additional Regulation about Shelters

According to these amendments, greater municipalities including Greater Municipality of Ankara revised their own Urban Development regulation as an obligation.

The other regulation is the Regulation of Establishment and Work Method of the Commission for Building Project Amendment.

In this respect, as practitioners of the urban developments, it is expected that personnel working in municipalities must know and implement legislative arrangements. However, answers taken in the survey show that there is a little knowledge about legislative arrangements on accessibility.

1. Urban development regulations (11 times)
2. Urban development Regulation of Greater Municipality of Ankara (3 times)
3. Elevator regulation (1 time)
4. Regulation about the Flat Ownership Law amendment (1 time)

Similar with laws, regulations and their content are not sufficiently known by municipality personnel participated the survey. Although 11 persons of total 34 mention urban developments regulations, they cannot give any detailed information about the regulations, such as their names or numbers. On the other hand, Urban Development Regulation of Greater Municipality of Ankara is given by only 3 people in this context, though which include several measurements for accessibility for people with disability.

Question 11: Which **standards** *do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?*

There are three standards prepared and published by Turkish Standard Institution directly related with accessibility and people with disability in Turkey apart from other standards that includes some measurements for accessibility.

- TS 9111- Specifications for Designing Residential Buildings for the Disabled

- TS 12576- Structural Preventive and Sign (Pictograph) Design Criteria on Street, Boulevard, Square and Roads for Handicaps and Elderly Persons in Urban Areas
- TS 12460- Rail Rapid Transit System in Urban Part 5- Design Criteria of Facilities for Handicap and Elderly People

In spite of being optional not obligatory, Urban Development Law forces to conform to relevant standards of Turkish Standards Institution in development plans and urban, social and technical infrastructure and buildings in order to provide built environment accessible and liveable for people with disability. For this reason, standards must be considered by municipalities in their works on built environment.

In this respect, the municipality personnel are asked about standards related to accessibility and people with disability in the content of legislative arrangements. 9 people answer the question as;

1. Standards of Turkish Standards Institution (5 times)
2. Neufert (4 times)

These 5 people mention standards as general and cannot give any further information about them. Therefore, the respondents' knowledge about Turkish standards is rather low.

PART III. STATISTICAL DATA

Question 12: Is there any statistical and demographic data about people with disability living in your municipality area (how many people with disability live, what are the disability groups, ages, gender, education and employment situation, etc.)?

Apart from 1 authorised person, all of the respondents reply the question as 'no'.

Question 13: What kind of data is available?

Because only 1 answer prefer to say 'yes' for the 12th question, only 1 explanation comes for this question. The same respondent give that available data is about that how many people with disability there are and how many people with disability benefit from services provided by municipality.

Question 14: Has this data been mapped?

All of the respondents give the answer 'no' for this question.

PART IV. APPLICATION OF ACCESSIBILITY PRINCIPLES

Question 15: According to you, are project proposals about providing accessibility of people with disability accepted in your municipality?

This question is aimed to identify municipalities' point of view about accessible implementations for people with disability and whether there is a difference between stand points of authorised and technical persons.

Most of the answers are affirmative for this question, namely accessibility is considered as an acceptable matter in municipalities, although it can be asserted that it is not tackled as a concept which is thought as one-dimensional in the question 6.

On the other hand, 5 respondents (2 of authorised and 3 of technical personnel) prefer to say 'other' as statements of 'both of yes and no', 'I do not know', 'some times' or 'it is not duty of this department'.

Only 1 respond comes as 'no' from an authorised person.

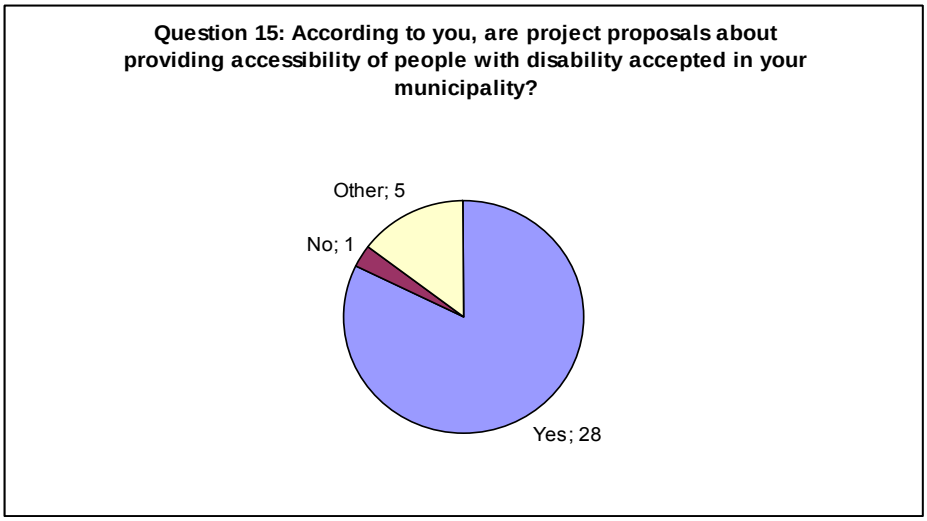

Figure 14: Project proposals' acceptance rate

Question 16: According to you, what are the causes of rejection of those project proposals?

Since there is one answer as 'no', this question is replied by this person as 'decisions come from superiors as hierarchical'.

Question 17: Are there any special work, planning or arrangement/application on accessibility for people with disability that have been made by your municipality?

In this question, whether any work, planning or arrangement on accessibility which is made for especially people with disability by municipality investigated.

18 respondents answer the question as 'yes'. Apart from 2 persons, most of the respondents are authorised and technical persons from the same directorate. While 5 of the municipalities have special works in Directorate of Infrastructure, 3 of Directorates of Parks and Landscapes have special works similarly. In addition, 1 authorised respondent from Directorate of Parks and Landscapes and one more from Directorate of Development and City Planning answer this question in affirmative manner.

On the other hand, 15 respondents give the answer as 'no' for this question. In this group most of the answers come from Directorate of Development and City Planning which 4 municipality's authorised and technical respondents and 1 authorised and 1 technical person from different municipalities give negative answers. Likewise, answers of 2 technical persons working in Directorate of Parks and Landscapes are involved in this group. One important point is that one of the municipalities with all of the directorates give this question as negative completely.

The last group answer is 'other' by 1 technical person in Directorate of Development and City Planning.

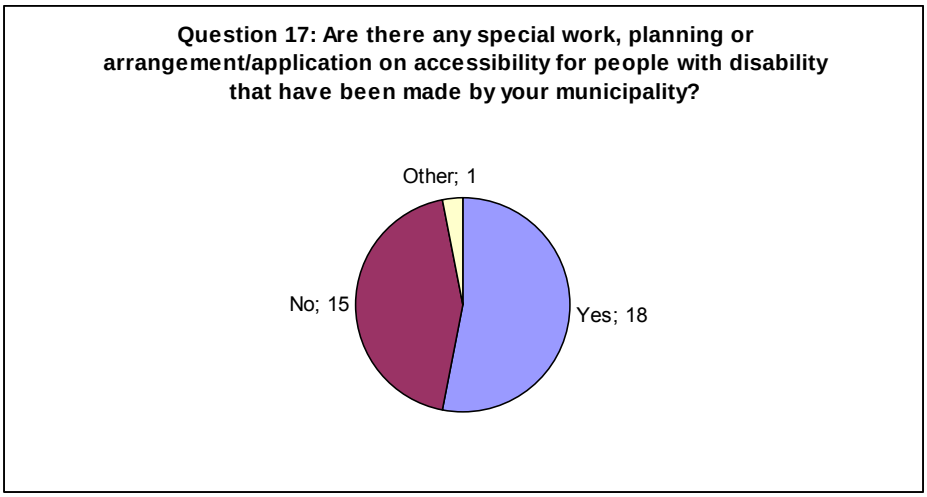

Figure 15: Special works, planning or arrangement rate

Question 18: What are subjects, contents and measures, and completion grade of those works done, please list.

In the question, municipalities' special works, planning or arrangements on accessibility and their grade of project or application are investigated. The answers are grouped according to each municipality's works;

In first municipality, explained works are;

1. Subject: Ramp (Directorate of Parks and Landscapes)
   Content: Ramp construction on sidewalks
   Measures: Ramps have been constructed in new and revised sidewalks, and entrances and exits of car parking areas.
   In which grade has the work remained? Applied
2. Subject: Playgrounds (Directorate of Parks and Landscapes)
   Content: Ramp and its slope
   Measures: In new construction of playgrounds and open areas, ramps have been constructed and their slope is considered.
   In which grade has the work remained? Applied
3. Subject: Park arrangement (Directorate of Infrastructure)
   Content: Arrangements for children with disability
   Measures: Suitable playground arrangements have been made for children with disability
   In which grade has the work remained? Applied

In the second municipality, there is one work;

Subject: Park (Directorate of Infrastructure)
Content: Arrangements for only people with disabilities
Measures: In the walking route, ramps have been constructed, suitable banks have been designed and basketball baskets have been put for wheelchair users.
In which grade has the work remained? Applied

In the third municipality, two works are explained similar to former ones;

1. Subject: Park (Directorate of Parks and Landscapes)
   Content: Play equipments
   Measures: The amendment of a present park by providing transfer from car parking areas, by putting ramps and play equipment.
   In which grade has the work remained? Thought

2. Subject: Sidewalks (Directorate of Infrastructure)
Content: Ramps
Measures: For people with disability and puset users, ramps have been constructed minimum 90 cm.
In which grade has the work remained? Applied

Forth municipality has a similar project as;
Subject: Park arrangement (Directorate of Infrastructure and Directorate of Parks and Landscapes)
Content: All of the arrangements have been made for people with disability
Measures: In one of the parks, all of the area has been planned and constructed for people with disability. While the entrances, playgrounds, sport instruments, educational basketball with handrails and like have been designed for all types of disabilities, all of the functions, like walking routes, WCs, café have been constructed in order to access by people with disability.
In which grade has the work remained? Applied

The last municipality's special works are reported as;
1. Subject: Recreation Area (Directorate of Parks and Landscapes)
Content: Social Needs and Rehabilitation Building Construction
Measures: In the world standards, a building has been constructed, which includes swimming pool and play grounds.
In which grade has the work remained? Applied
2. Subject: Legislation (Directorate of Development and City Planning)
Content: Urban Development Regulation of Greater Municipality of Ankara
Measures: Some amendments for people with disability have been made in Urban Development Regulation of Greater Municipality of Ankara in 2006.
In which grade has the work remained? Applied

6 of total 9 works, planning or arrangements on accessibility are reported as related to one of parks, playgrounds or recreation areas in each municipality area, thus activities of municipalities remain limited and cannot be taken into various fields. The other 2 works are about ramp construction on sidewalks that respondents do not gives any criteria about these ramps; for example slopes, surface materials, width etc. As a matter of fact that according to answers of

question 11, there is not sufficient information about ramps and their construction principles. For this reason, it should be discussed that whether constructions made are suitable and useable, or not.

Figure 16: Special accessibility work numbers

Question 19: What are the causes of the works that has not been applied and causes of any special work that has not been made?

The options of the question and the answers for each alternative are;

- Authority has refused (-)
- There is not disabled population which necessitate this application (-)
- There is no available data on the number of people with disability and their disability group live in the region (5 times) (4 authorised and 1 technical person)
- Since the infrastructure changes frequently, it is unnecessary to make application (it will be upset anyhow) (2 times) (1 authorised and 1 technical person)
- Applications are quite expensive; so they are not preferred to be done (3 times) (1 authorised and 2 technical persons)
- There are some financing problems (3 times) (1 authorised and 2 technical persons)
- What should be made for providing accessibility is not known (2 times) (1 authorised and 1 technical person)

- There is no sufficient knowledge about standards which are necessary for application (7 times) (2 authorised and 5 technical persons)
- It is difficult to reach the standards (2 times) (2 technical persons)
- Technical personnel is not enough (4 times) (2 authorised and 2 technical persons)
- Technical personnel who are responsible for planning, applying and controlling do not have sufficient knowledge (8 times) (3 authorised and 5 technical persons)
- It is not known where assistance is taken (6 times) (2 authorised and 4 technical persons)

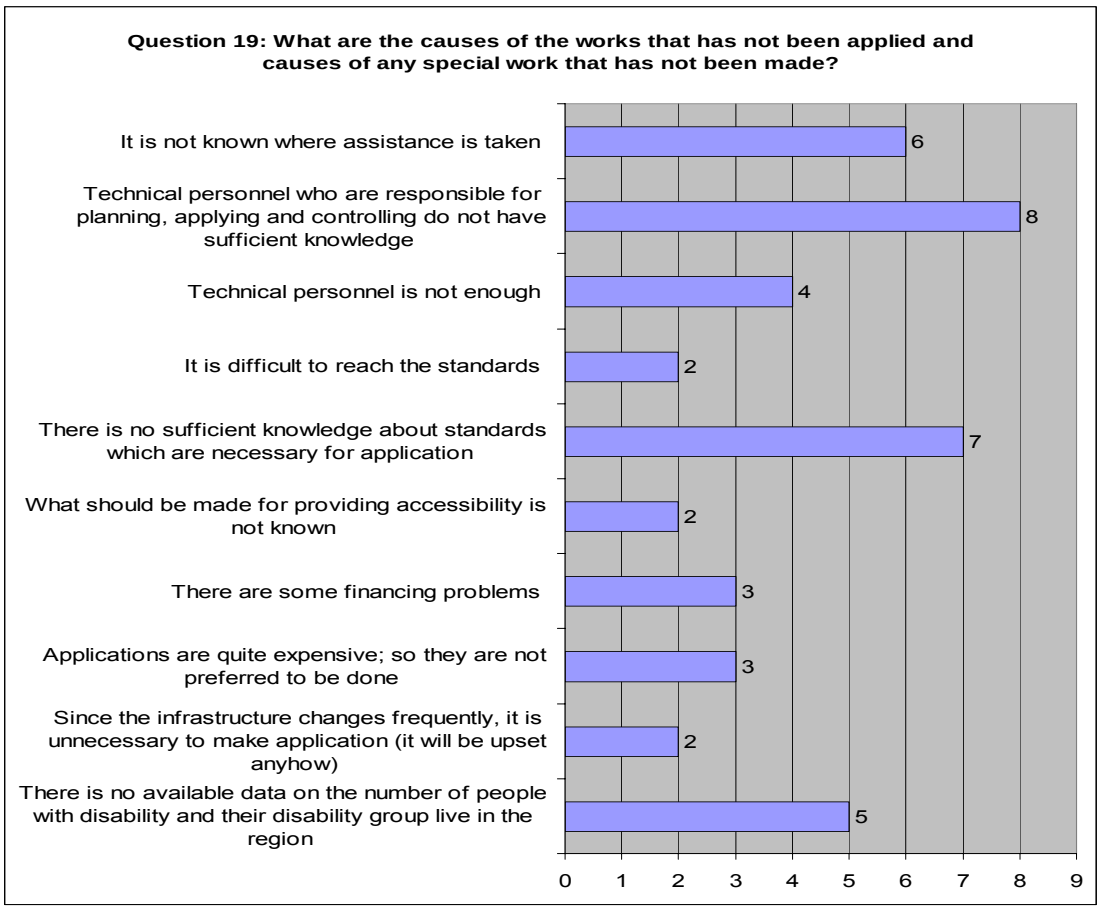

Figure 17: Causes of not applied works or work absence

According to the results above, most of the answers gather on 'insufficient knowledge of technical personnel making planning, applying and

controlling', which is mostly chosen by technical personnel themselves. Likewise, 'knowledge level about standards' is other criticised matter in this question that 7 respondents give as answer, mostly technical personnel themselves again. 6 persons who are 2 authorised and 4 technical, declared that 'it is not known where assistance is taken'. The other mostly given answer that is chosen by 5 respondents as 4 authorised and 1 technical person is about 'unavailable data on the number of people with disability and their disability groups live in the region'. These 4 topics appear as causes of the insufficient special works of municipalities.

Furthermore, the 'other' option is chosen by 18 respondents. These answers can be grouped as;

1. Disability organisations make not sufficient demands and pressures (5 times)
2. Daily activities of municipality are doing before all else and there is no sufficient time for tackling accessibility matter (3 times)
3. Because Municipality's responsibility area is slum transformation region, accessibility matter is of secondary importance (3 times)
4. There is social and other forms of unconsciousness (2 times)
5. Insensitivity to the matter (2 times)
6. Other (unconsciousness of managers, planning and urbanisation problems, insufficient knowledge of masters)

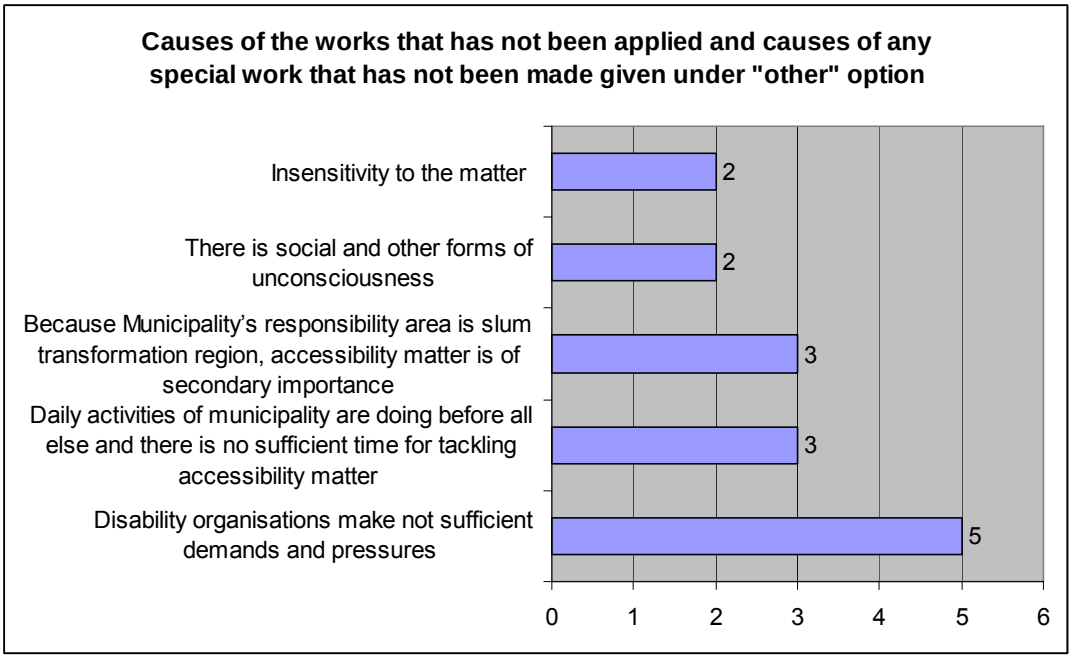

Figure 18: Causes of not applied works or work absence under 'other' option

It is thought in this part of the study that respondents bring up the causes plainly and in a simple way. Firstly, they do not consider the matter as a part of their responsibility and duty, which they expect 'demands and pressures from people with disabilities' and, in sum, they expect that people with disability remind themselves to municipalities. Therefore, accessibility matter has not seen as a part and component of planning, design, construction and activity of municipality yet. Moreover, 'low level knowledge' appears as a cause of not making suitable accessibility implementation, however, municipalities and persons as individual remain inactive in terms of change this situation, secondly.

Question 20: In development plans, urban designs and landscape architecture projects (or works of your department) prepared by your municipality, are needs of people with disability considered?

For this question, most of the answers are given as 'yes'. On the other hand, 3 respondents, as 2 authorised and 1 technical persons, prefer to say 'no'. 2 of them are from Directorates of Development and City Planning.

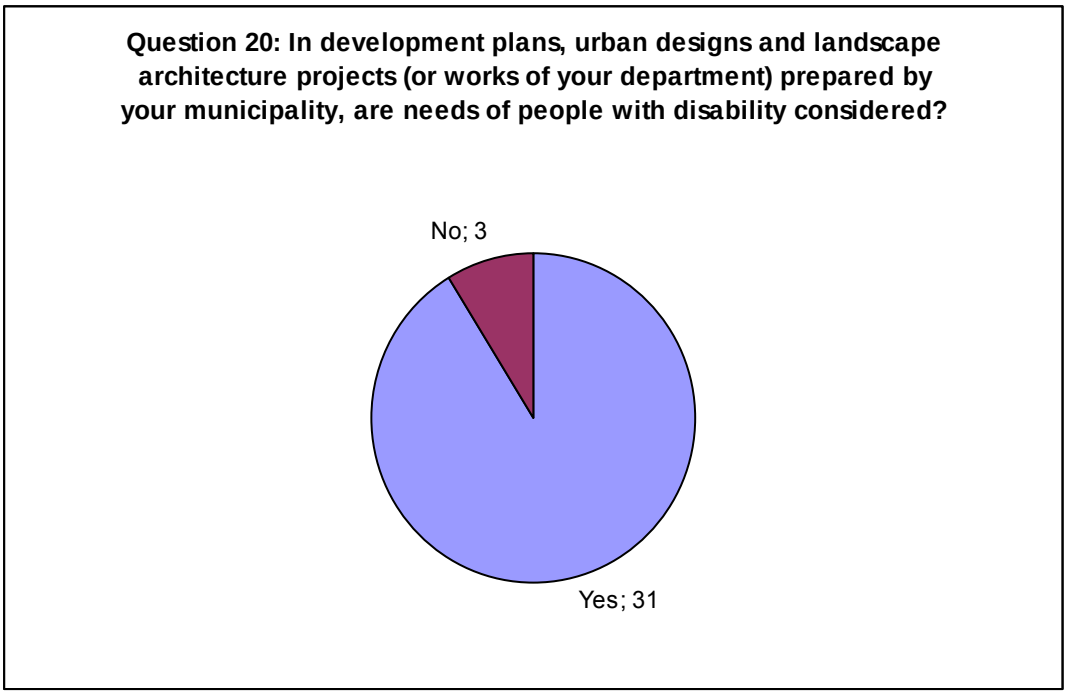

Figure 19: Work rate of considering needs of people with disabilities

Question 21: Which development plans, urban design and landscape architecture projects (or works of your department) consider needs of people with disability?
Question 22: In those development plans, urban design and landscape architecture projects (or works of your department) considering needs of people with disability, what kind of principles are there?

In this part of the survey, municipalities are asked that how much they consider and include accessibility and people with disability in daily activities and routine works. The 21st and 22nd questions are evaluated together in order to compare outputs. Also the answers are grouped according to their directorates from which similar results come.

1. Directorates of Development and City Planning

For Question 21: a. In all of the building architectural projects (9 times)
b. In urban plans (1 time)
(5 authorised and 5 technical personnel answer)

For Question 22: A. Elevators (6 times)
B. Ramps (5 times)
C. Entrance arrangements (2 times)
D. Used materials (2 times)
E. Handrails (2 times)
F. Other (circulation on same level, access from sidewalks, door width, WCs, escalator)
(3 authorised and 3 technical personnel answer)

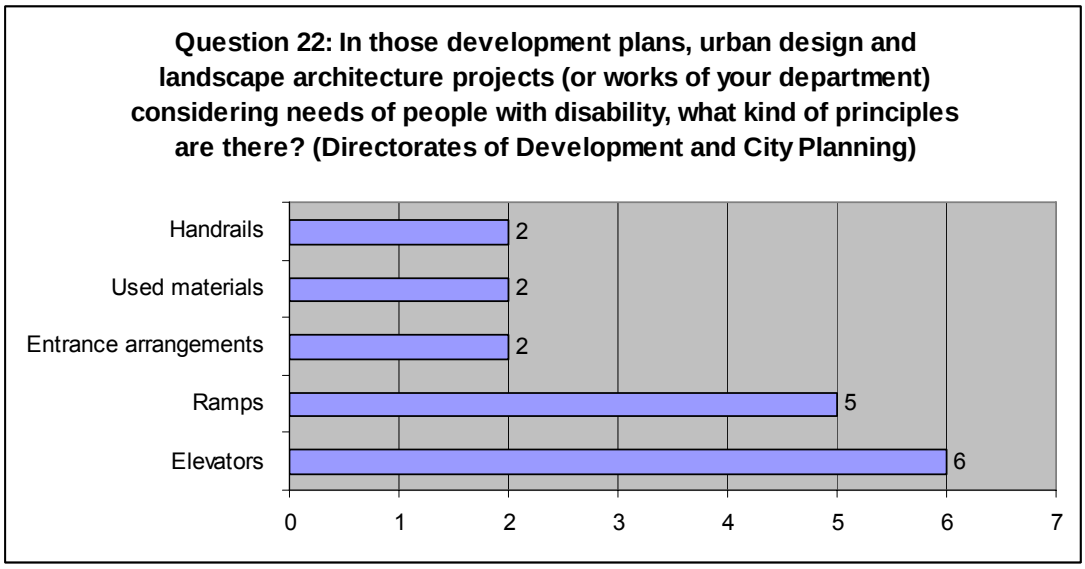

Figure 20: What kinds of principles are considered in Directorates of Development and City Planning Works

2. Directorate of Infrastructure

For Question 21: a. On sidewalks (5 times)

b. In new and revised projects (4 times)

c. In landscape projects (3 times)

d. In buildings (2 times)

(5 authorised and 6 technical personnel answer)

For Question 22: A. Ramps on sidewalks (8 times)

B. Elevators (3 times)

C. Park entrance arrangement (3 times)

E. WCs (2 times)

F. Other (building entrance ramp)

(4 authorised and 6 technical personnel answer)

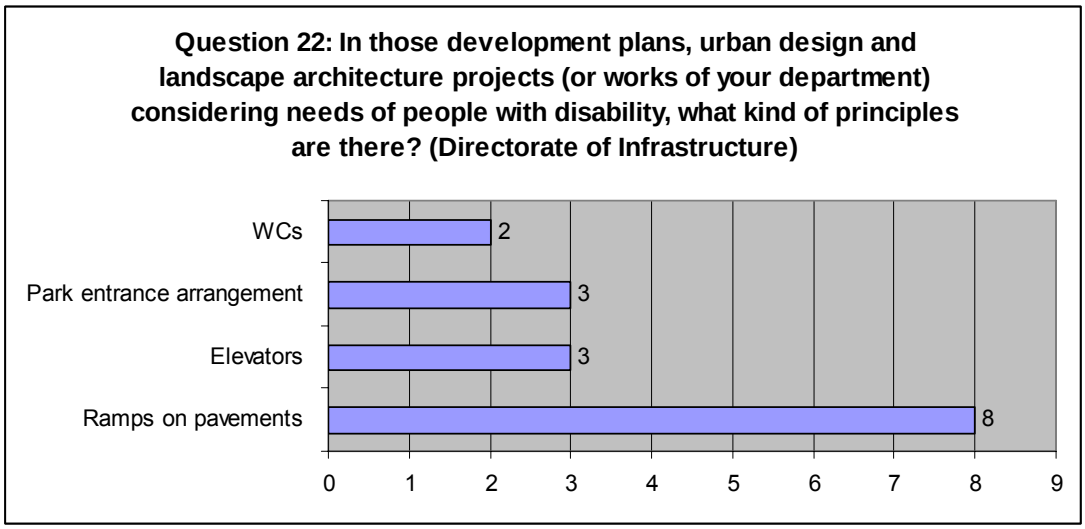

Figure 21: What kinds of principles are considered in Directorates of Infrastructure Works

3. Directorate of Parks and Landscapes

For Question 21: a. In all of the parks and landscape projects (5 times)

b. In some parks and landscape projects (4 times)

c. Other (in existing parks)

(5 authorised and 5 technical personnel answer; total of respondents)

For Question 22: A. Ramps (6 times)

B. Park entrance arrangement (5 times)

C. Circulation (2 times)

D. Used sport and play materials (2 times)

E. Other (surface materials, plant care, elevator, resting equipment)

(5 authorised and 5 technical personnel answer)

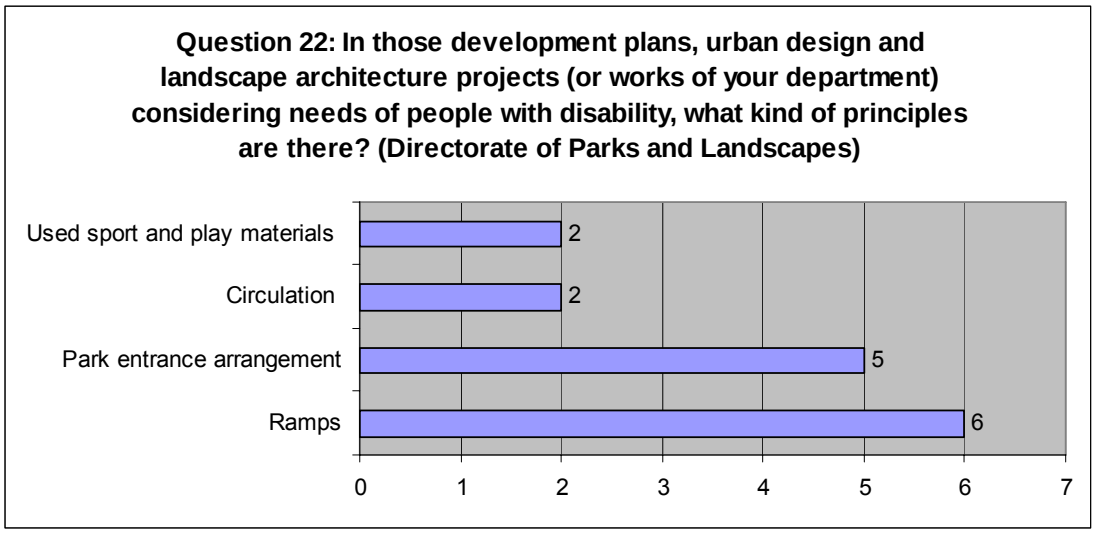

Figure 22: What kinds of principles are considered in Directorates of Park and Landscapes

Question 23: In (these) development plans, urban design and landscape architecture projects (or works of your department), what are the causes of ***not being considered/not being sufficiently considered*** *needs of people with disability?*

- Authority has refused (1 time)
- There is not disabled population which necessitate this application (1 time)
- There is no available data on the number of people with disability and their disability group live in the region (6 times)
- Because necessary measures have not been taken in large scale plans, then it cannot be adapted to small scale plans (14 times)
- Since the infrastructure changes frequently, it is unnecessary to make application (it will be upset anyhow) (3 times)
- Applications are quite expensive; so they are not preferred to be done (1 time)
- There are some financing problems (3 times)
- When work is made with tender bid, firms do not want to do application (3 times)
- What should be made for providing accessibility is not known (6 times)
- There is no necessary legislative arrangements in Turkey (10 times)
- There is no sufficient knowledge about standards which are necessary for application (9 times)
- It is difficult to reach the standards (1 time)

- Technical personnel is not enough (3 times)
- Technical personnel who are responsible making planning do not have sufficient knowledge (8 times)
- Technical personnel who are responsible making application do not have sufficient knowledge (9 times)
- Technical personnel who are responsible making control do not have sufficient knowledge (7 times)
- It is not known that where assistance is taken (7 times)

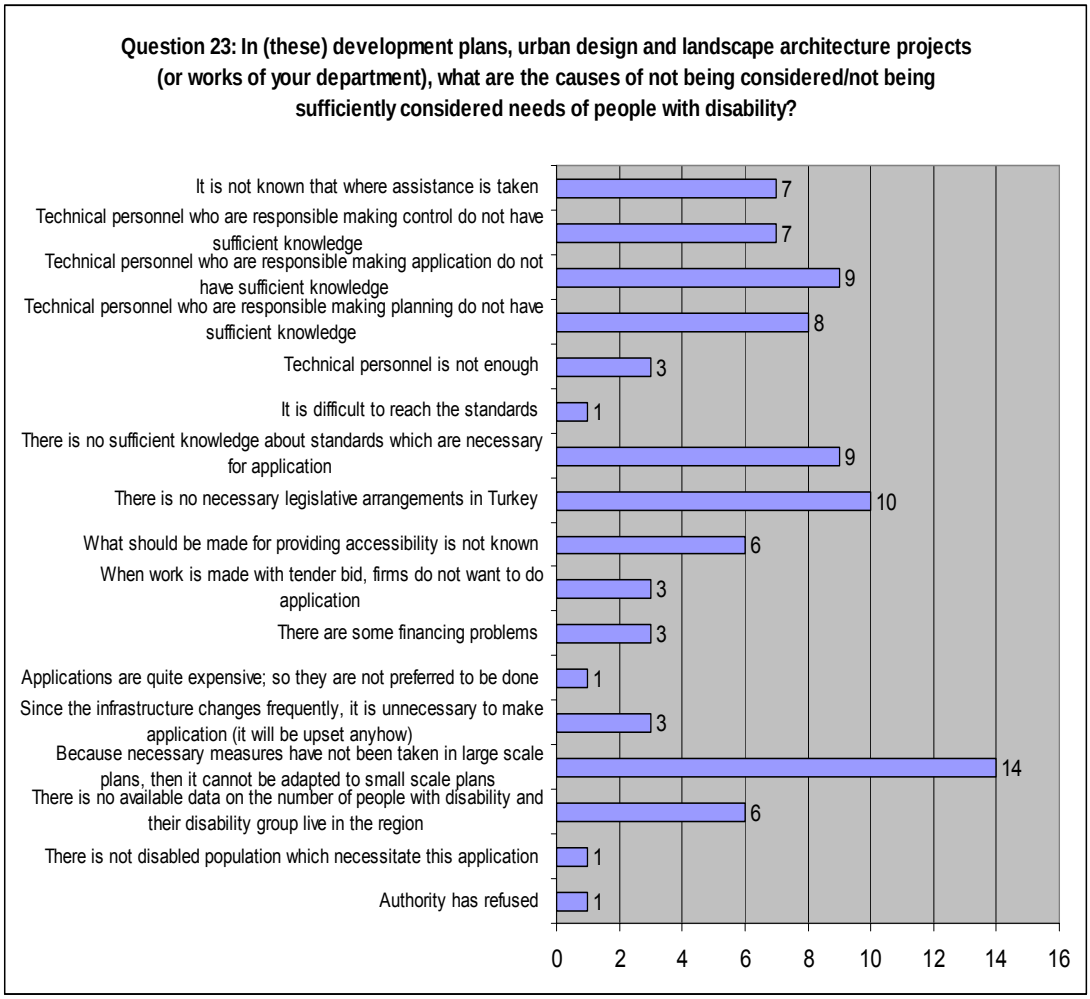

Figure 23: Causes of not being (sufficiently) considered needs of people with disabilities in routine works

When daily activities and routine works are considered, some new causes appear for not being (sufficiently) considered needs of people with disability with new alternative options given in the question. The large scale plans, especially, are given as a cause by a majority of respondents because they pretend to taken into account necessary measures for accessibility. The other option stressed mostly is about legislative arrangements, which respondents thought that there is not necessary legislation in Turkey. As mentioned before, despite several legislative arrangements, laws and regulations effect for years, this legislation is not known adequately, thus this opinion appear. The reason of this opinion can be investigated in its weaker and less obligatory content than other legislation.

The low knowledge level is the other main topic that mostly mentioned. The insufficient knowledge about standards, insufficient knowledge of technical personnel making planning, application and control are marked 33 times totally.

The 'other' option is answered by 19 respondents. These answers can be grouped as;

1. There are social and other forms of unconsciousness (6 times)
2. There is not any dissuasive provision and sanction for municipalities (4 times)
3. Local urbanisation problems are dealt with primarily (3 times)
4. Others (insensitivity and irresponsibility of managers, the issue is seen as secondary duty, topographic conditions)

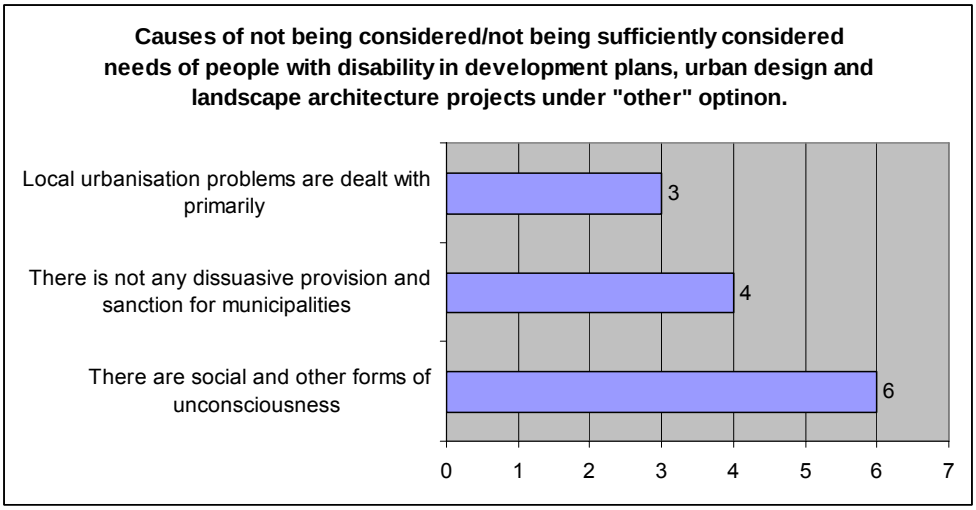

Figure 24: Causes of not being (sufficiently) considered needs of people with disabilities in routine works under "other" option

Respondents complain about unconsciousness in the form of not only technical but also social again. They are also mistaken about legislative enforcement, which is in effect for newly built areas over ten years and for existing areas over three years. However, they are in the right about necessity of stronger and more influential legislative arrangements.

5.4.2. Evaluation of the Survey Applied to Units Serving for People with Disability

Before the main parts, the identification part is filled as the name of disability unit at first. Then, it is asked to the respondent whether there has been anything done about built environment and providing accessibility for people with disabilities, or not.

The name and institutional structure of the three units are different from each other. While the first one of them is serving as a directorate, second serves as a centre and the last one is called a unit. In the names of the units various terms are also used; whilst all of them chose the term handicapped people, many other terms are adhered to as ‘rehabilitation’, consultation’ and ‘service’.

Besides, in the identification part, it asked to the respondent whether or not any work has been executed in the built environment to provide accessibility for people with disabilities, or not. All of the interviewed persons answer this question as “yes”.

PART I. DISABILITY AND ACCESSIBILITY

Question 1: What do you think about disabled, please define?

All of the respondents answer this question. Since answers are alike, they can be categorised under the same topics with the answers of technical respondents’, although their number is fewer.

1. person who cannot use some organs/body functions (2 times)
2. person who is different from other (normal) people according to perform daily activities (2 times)
3. person with organ or body deficiency/impairment (1 time)
4. person who cannot meet/is in difficulty meeting his/her needs (1 time)
5. in a social manner, the person is ignored by society (1 time)

The “difference” and “inability” concepts are also used in the definitions of unit respondents. Inability in the performance of daily activities performance and use organs or body functions are the mostly mentioned criteria for people with disabilities, on the other hand, organ deficiency and inability in meeting needs are the other concepts that are named by respondents. Accordingly, most of the opinions appear in medical approach to disability like result of technical departments’ survey. On the contrary, in one respondent’s answer there is a social manner which emphasises insufficient measures and attention, and insufficient participation of people with disabilities. In spite of being working in disability unit that is directly related to the issue and serving for people with disabilities, it is seen that disability is not tackled yet as a social environmental effects there.

Question 2: How many disability groups are there, please list?

All of the respondents of disability units give answer for question as;

1. people with visually impaired (5 times)
2. people with orthopaedic disability (5 times)
3. people with hearing and speech impairment (4 times)
4. mentally retarded people (5 times)
5. people with chronic illnesses (2 times)
6. ‘bodily or mentally disabled’ people (1 time)

As can be derived above, there are fewer categories than technical personnel’s answers. In addition, four main disability groups are stressed by the respondents.

The visual impairment, orthopaedic disability and mental retardation appear as the answers that come from majority of the interviewed 5 people. The hearing and speech impairment, on the other hand, is the other answer referred by respondents mostly. While chronic illness is stated by 2 persons, “bodily or mentally disordered” is only seen as one of the answers.

The disability groups are categorised by the unit’s staff are gathered under main groups as they know people with disabilities more.

Question 3: What is mobility limitation? Who is involved in this group?

In the survey, first part of the question about “definition of mobility limitation” is answered by 3 of the 6 respondents. They are;

1. Incapability of making things or action which should be done or which are wanted to do, done by other people (1 time)
2. Limitation in seeing, hearing, thinking, in body or mental (1 time)
3. Physical reduction in social and work life (1 time)

"Incapability", "reduction" and "limitation" are the main concepts mentioned with "mobility limitation". On the other hand, one of the respondents as an authorised person gives insufficient measures which are not taken by society. When problems experienced by people with disabilities are thought in the answers, last and the only one answer gives causes of the mobility limitation situation.

Second part of the third question is about who are mobility limited people. All of the interviewed personnel respond this question and answers can be grouped as;

1. people with mental retardation (3 times)
2. people with orthopaedic disability (3 times)
3. visually impaired people (2 times)
4. people have chronic illnesses (1 time)
5. all of the people (1 time)

It is seen that mobility limitation situation is only connected with disability by respondent. Two of the disability groups are declared three times, which are orthopaedic disability and mental retardation that is not given by technical personnel as a distinct group. On the other hand, visually impaired people and people have chronic illnesses are seen as the other mobility limited groups. The only answer having different approach to the concept is given as "all of the people".

Question 4: Who is handicapped, please define?

Because handicapped is a consequence of being disabled and being limited or impeded by barriers, it is important to understand this concept for people working and serving for people with disabilities. To be aware of the distinction these two concepts will bring a indirectly benefit for people with disabilities.

All of the respondent explicate the question as;

1. disabled people (3 times)
2. the people having incapability and inability for a function/action (2 times)
3. a situation caused by physical and social barriers (1 time)

Like technical personnel, disability unit personnel interpret handicapped as a disabled mostly, which is given by 3 people. Likewise, handicapped is construed related with incapability and inability for a function or action by two respondents. Conversely, one of the answers comes from an authorised person who discloses the relation between physical and social barriers and handicapped. Therefore, it cannot be said that the concept of “handicapped” is evaluated with its meaningful scope.

Question 5: What are the needs of people with disability in the built environment, please list?

The importance of the survey questions and their answers about accessibility for disability unites is as much as other units of municipalities, owing to their affirmative answers concerning the question of whether accessibility falls within the mission, or not.

The first accessibility question about needs of people with disabilities in the built environment is answered by all of the respondents, but 5 of them can be evaluated and grouped as;

1. People with disability should use and facilitate public spaces/social facilities (4 times)
2. Open spaces; a. additional equipments (4 times)
   b. sidewalks (3 times)
   c. over-crossing (2 times)
   d. ramps (1 time)
   e. other (1 time)
3. Buildings; a. building entrance arrangements (3 times)
   b. elevator (2 times)
   c. WCs (2 times)
   d. other (handrails and furniture) (4 times)
4. Public transport (2 times)
5. Answers according to disability groups (as wheelchair) (2 times)

Public spaces and facilities are mostly emphasised by respondents like technical personnel. The other fields have to be included suitable arrangements which are considered by respondents as needs of people with disabilities for accessibility. Besides, two people identify and stress wheelchair users’ needs

especially. It can be derived that disability unit personnel cannot separate needs of people with disabilities within built environment from suitable arrangements from this question.

Question 6: What is accessibility, please define?

In this question, it is aimed that how much personnel is familiar to accessibility concept. There are three answers because only half of the respondents can interpret the question.

1. Suitable building and route in terms of permission for access and usability (1 time)
2. Can being maintain life (1 time)
3. Access by him/herself independently, not being in need help to other (1 time)

Whilst one of the respondents talk about usability of different buildings and facilities, the other two emphasis people with disabilities and his/her more comfortable and independent life.

The accessibility cannot be handled sufficiently with its all sides.

Question 7: What kind of arrangements should be made in built environment in order to provide accessibility? (a. in open spaces, b. in buildings and c. in public transportation vehicles and systems)

Since all of the disability units declared that they pertain to built environment works related to people with disabilities, this question gains importance in terms of their information level and what extent they know about suitable arrangements. There are 6 answers about open spaces and public transportation and 5 answers about buildings.

1. Open spaces; a. ramps (4 times)
   b. sidewalks (3 times)
   c. suitable/special designed urban furniture (3 times)
   d. signage/map (2 times)
   e. elevators or escalators (2 times)
   f. distinct special routes for people with disability (1 time)
   g. other (WC) (1 time)
2. Buildings; a. elevators (4 times)
   b. building entrance ramps (2 times)

c. suitable door width (1 time)

d. handrails (1 time)

e. audible/visual equipments (1 time)

f. other (stairs) (1 time)

3. Public transport and system

a. suitable vehicles (1 time)

b. infrastructure arrangements (bus stops and metro station) (1 time)

c. bus lifts (4 times)

d. special services for people with disability (1 time)

e. other (announcement) (2 times)

Open space ramps and elevators for buildings are mostly emphasised arrangements according to the survey. In addition, signage and suitable urban furniture are the other mentioned examples for accessibility.

Question 8: What are the most important barriers for accessibility of people with disability in your municipality boundaries? (Please list according to their importance)

As different from technical personnel responds, disability unit personnel give only barriers in the built environment. The barriers in the field of planning or urban problems are not expected from this group certainly.

The data about barriers can be grouped as;

1. Barriers about/on sidewalk; as general 'sidewalks' (1 time), ramps (not exist or not suitable) (2 times), sidewalks are too height (1 time), unsuitable crossing (1 time), hollows (1 time), (6 times total)
2. Public transport; unsuitable vehicles (2 times) (2 times total)
3. Buildings; unsuitable entrances (1 time), as general 'buildings' (1 time), unsuitable public building (3 times), elevator (1 time) (6 times total)

It is seen that some implementations are accepted as barriers by disability unit personnel as different from technical ones, such as unsuitable public building, hollow on sidewalk and present elevators in buildings.

PART II. LEGISLATION

*Question 9: Which **laws** do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?*

The Laws given by disability unit respondents are;

1. People with Disabilities Act numbered 5378 (3 times)
2. Urban Development Act numbered 3194 (related article is not given) (1 time)
3. Flat Ownership Act numbered 634 (1 time)
4. Greater Municipality Law numbered 5216 (1 time)

According to the answers, all of the authorised persons of disability unit know about People with Disabilities Act (numbered 5378) articles, in other words, sanctions applied by the Act. Furthermore, Flat Ownership Act (numbered 634) is the other given important Law by an authorised respondent. Another authorised person thinks of the Urban Development Act (numbered 3194) too.

*Question 10: Which **regulations** do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?*

The regulations mentioned by respondents are;

1. Urban Development Regulations (1 time)
2. Regulation about the Flat Ownership Law amendment (1 time)

It is seen that regulations including accessibility arrangements for people with disabilities are not sufficiently known by disability unit personnel. Even so they declare that they work about accessibility in the built environment.

*Question 11: Which **standards** do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?*

Only one authorised person can reply the question when Turkish standards related to accessibility are asked to the persons working in disability units. 'The Standard Books of Turkish Standards Institution' comes as the answer.

III. STATISTICAL DATA

Question 12: Is there any statistical and demographic data about people with disability living in your municipality area (how many people with disability live, what are the disability groups, ages, gender, education and employment situation, etc.)?

For this question, 5 respondents, in other words all of the municipalities including disability units say ‘yes’, in contrast to technical personnel of these municipalities. On the other hand, one of the respondents, an authorised person, reply the question as ‘no’ even so an affirmative answer comes from the same disability unit’s worker.

Question 13: What kind of data is available?

Since statistical and demographic data are declared as available by interviewed persons, it should be grouped according to three municipalities;

1. In the 1st Unit: There are number of disabled people, disability groups, age and gender, education and employment situation, and requests of people with disabilities.
2. In the 2nd Unit: There are number of disabled people, disability groups, age and gender.
3. In the 3rd Unit: There are disability groups and gender.

It can be derived that, there is common data available for the municipalities. However, the data is not shared and used in all of the departments in the municipality as a whole, which can be interpreted with regard to responses of technical persons for this question.

Question 14: Has this data been mapped?

All of the respondents give the answer ‘no’ for this question. For this reason, it can be said that available data cannot be used in the process of service planning, and facility and arrangement design as there is not any mapped information. It is not known for example; where people with disabilities live with the information of disability groups or how accessibility needs they have in physical environment or transportation system.

IV. APPLICATION OF ACCESSIBILITY PRINCIPLES

Question 15: According to you, are project proposals about providing accessibility of people with disability accepted in your municipality?

All of the respondents answer the question by saying ‘yes’. Thus, it can be derived from these answers that when disability units prepare project proposal concerning accessibility, it will be accepted by other departments of the municipalities.

Question 16: According to you, what are the causes of rejection of those project proposals?

Because of replying the 15th question as 'yes', this question is not asked toward interviewed persons.

Question 17: Are there any special work, planning or arrangement/application on accessibility for people with disability that have been made by your municipality?

Apart from 1 of the disability unit personnel, respondents answer the question as 'yes'.

Question 18: What are subjects, contents and measures, and completion grade of those works done, please list.

Most of the disability unit personnel give affirmative answers in former question, this question is important that discloses how much disability units make or prepare special work, planning or arrangement/application on accessibility for people with disabilities.

Like survey of technical departments, the answers are grouped according to each disability unit's work;

In first disability unit explained work is;
Subject: Over-crossing
Content: Related department of municipality is informed
Measures: To construct elevator on existing over-crossing
In which grade has the work remained? Continue

In the second disability unit's work is reported as;
Subject: Park arrangement
Content: Arrangements for people with disabilities
Measures: Ramps, WCs, play equipment have been arranged with related department municipality.
In which grade has the work remained? Applied

The last disability unit, there is one special work again;
Subject: Model Street

Content: To remove or improve exits barriers in selected streets
Measures: A project has been prepared in order to create barrier-free street with a university.
In which grade has the work remained? Project is done

All of the works described by disability unit personnel are different from each other in terms of their subject, content and measures taken. It may be expected that owing to working for people with disabilities and their needs, disability units tackle and produce accessibility measures and practices. While disability units have cooperated in projects with a university or directorate related to built environment, the other one consults the related department about accessible measures.

Question 19: What are the causes of the works that has not been applied and causes of any special work that has not been made?

The options of the question and the answers come from the du respondents are;

- Authority has refused (2 times)
- There is not disabled population which necessitate this application (-)
- There is no available data on the number of people with disability and their disability group live in the region (-)
- Since the infrastructure changes frequently, it is unnecessary to make application (it will be upset anyhow) (2 times)
- Applications are quite expensive; so they are not preferred to be done (-)
- There are some financing problems (-)
- What should be made for providing accessibility is not known (1 time)
- There is no sufficient knowledge about standards which are necessary for application (1 time)
- It is difficult to reach the standards (1 time)
- Technical personnel is not enough (-)
- Technical personnel who are responsible for planning, applying and controlling do not have sufficient knowledge (2 times)
- It is not known where assistance is taken (1 time)

According to the answers given by respondents for optional part of the question, three subjects are foremost; refusing of authority, problems originated from infrastructure implementation, and low knowledge level of technical

personnel. All of the other subjects are related to absence of knowledge about accessibility, standards and assistance.

On the other hand, 5 of the interviewed persons from the disability units add some more comments for the question;

1. Persons or organisations should consult with disability units (2 times)
2. Authorised persons neglect the matter (2 times)
3. To solve old problems is very difficult (1 time)

The answers come from the same municipality in the same way. These are about authorised persons and absence of communication between other departments/people and disability units. Besides, experienced problems are declared as difficult in terms of solving.

5.5. Afterthoughts: Some Remarks about the Field Study

The first part of the questionnaire related to the concepts of disability and accessibility are answered by most of the respondents. The questions about disabled, disability groups, handicapped and needs of people with disabilities in the built environment are replied by all of the respondents especially. However, answer rate decreases in the questions about accessibility; this situation is similar in the interviews of the disability units' personnel.

Not only information concerning knowledge level of the municipalities' personnel can be obtained from these questions, but also their viewpoint about the disability and accessibility matter can be revealed as important outputs. For instance; answers for the question "What are the most important barriers for accessibility of people with disability in your municipality boundaries?" show that both technical personnel knowledge level and their awareness about barriers. Four responds as "there is no barrier in my responsibility area" give some evidences for viewpoint for the concepts.

The questions about legislative arrangements are answered by few technical persons; even they do not have necessary information about laws, regulations or standards of accessibility. Disability units' respondents have also little information about accessibility legislation.

When statistical data is questioned, apart from one respond, all of the answers are given as "no" in technical departments. In contrast, all of the disability units have a variety of statistical data on disabled people.

The last part interrogates local agencies' works on accessibility. While most of the persons give affirmative answers when they asked about project proposals' acceptance situation in the municipality, special works on accessibility are reported by nearly half of the respondents. In total, 9 special works are declared and 6 of them are as arrangements of parks, playgrounds and recreational areas. The respondents working in directorates of parks and landscapes mostly mention these special works. The causes of the works that has not been applied and causes of any special work that has not been made are the subject of the next question and answers are parallel with the outputs of the previous parts of the questionnaire. Mostly mentioned topics are insufficient knowledge about the disability matter and standards. Moreover, where assistance can be taken is not known and there is not data about people with disabilities are the other popular answers. Other causes are also asked to the interviewed persons and "Disability organisations make not sufficient demands and pressures" is the most mentioned topic.

The same question is answered by almost all of the disability unit personnel in affirmative way. One special work is stated by each of the disability unit, but they are different from technical departments' works, interestingly.

For the next question which include whether needs of people with disabilities are considered in routine works of local agencies, or not, almost all of the answers are affirmative. Besides, most of the respondents from all of the three directorates give some arrangements for their routine works; however they do not give detail arrangements of accessible built environment.

In spite of giving affirmative answer earlier, many respondents also reply the question about "the causes of not being considered/not being sufficiently considered needs of people with disability". The large scale plans are mostly accused of not being considered necessary measures for accessibility. The respondents also think that "there is no necessary legislative arrangement in Turkey". The other causes are assessed as low knowledge level of technical personnel and unfamiliarity of standards. Social and other forms of unconsciousness are given as other cause of not being considered/not being sufficiently considered needs of people with disability in routine works by the respondents, which are mentioned by more persons for this question than for the question about special works.

CHAPTER 6

FINDINGS AND CONCLUSIONS

"In a fully accessible society, the main feature would be the 'universal recognition that all structures have to be built and all activities have to be organised for the widest range of human abilities'."

S. Wendell (1996, pp: 55; cited in Freund, 2001, pp: 705)

Barriers and inaccessibility are still a reality in all societies regardless of their levels of development. In Turkey, the problem of accessibility has been compounded by a host of difficulties. This study endeavours to reveal some of the problems shared by responsible local agencies, particularly those problems which originate in their approach to the disability and accessibility issue. In this chapter the findings of this case study are discussed and conclusions drawn.

In the final part of the thesis, conclusions are derived from the whole study and some suggestions are advanced in the context of these conclusions.

6.1. Findings of the Field Study

Before the whole study is evaluated, the findings of the field study and their significance are assessed in order to designate information for conclusions. These findings are grouped into three as findings that relate to:

1. the approaches of professionals
2. the approaches of municipalities
3. the comparison of technical departments and disability units

6.1.1. Findings Relating to the Approaches of Professionals

The questions related to basic terms and concepts pivoting primarily on disability and accessibility disclose the level of knowledge and familiarity of interviewed persons.

All of the 34 respondents volunteered to be questioned about definitions of disability, handicap and disability groups. Respondents considered the disabled person as ‘a different’ individual whose negative conditions are the dominant factor in his/her life. Deficiency, incapacity and inability are foremost features of disabled persons. Respondents did not know of the environmental or social organisation dimension. They shared a traditional and widespread view, a medical approach to disability, which focuses on dependency. From this point of view, the barrier is considered to be with the disabled person himself. Therefore, environmental, social or cultural barriers are easily overlooked.

Responses to the handicap concept are similar. While most of the respondents equated incapability and inability with handicap, 25% of them thought that these two concepts have the same meaning. Only 5 respondents, who may have thought that there should be a reason for asking about these two different concepts, gave a correct answer.

- These findings show that technical professionals’ knowledge about disability is rather limited. It is evident that they have not developed their understanding of the concepts, whether they have been working with people with disabilities, or not. They may not interact with any disabled person. This professional practice will influence their routine duties and special projects concerning people with disabilities. It can be suggested that they perceive and create ableist spaces implicitly, although this proposition requires further investigation.

- It is unlikely that any project or programme for removing barriers in the built environment will succeed if it is undertaken by personnel who deny or oversee the existence of barriers.

- Technical personnel are unaware that a handicap is the result of a process that relates to barriers.

The questions relating to the definitions of mobility limitation and mobility limited people were answered by most of the respondents. The answers included

similar terms and explanations for disability and handicap, deficiency, incapacity and inability. Restricting or hindering barriers, inaccessible design and implementation were not mentioned again. Mobility limited persons were thought as disabled people, which may have stemmed from the context of the survey. Only 29% (10 persons) of respondents put children and elderly people into the mobility limited group, which is a rather low level.

- Professionals do not know that most of the people may be affected by barriers adversely and the implementation of a built environment would cause several problems for both disabled and able people whenever, or wherever. The low knowledge level about barriers appears with this question again.

Knowing disability groups is important not only for developing an understanding in terms of having an opinion of disabled people's heterogeneity as a group but also being aware of disabled people's different needs in the built environment.

People with visual impairment were the best known disability group, being mentioned by approximately half of the respondents. The second most recognised group concerned people with orthopedic disabilities and it was given by 35% of the respondents. Twenty-six percent knew of people with hearing and speech impairment and 20% of mentally retarded people.

Visual and orthopedic impairment were more visible and noticeable. Moreover, disabled people in these groups faced more difficulties in their social life and required more effort to overcome barriers; for this reason they may also have been better known by able-bodied people. On the other hand, the answer 'bodily or mentally disabled' was given by 38% of the respondents who probably oversaw the problems and needs of the different impairments.

Knowledge of the needs of disabled people in the built environment is as important as knowledge of disability groups, as it informs professional decisions about addressing accessibility. Answers indicated 15 different arrangements and they were mentioned 59 times in total. However, disability groups were known by the average 30% of respondents, and only 20% of them mentioned different disability groups' needs.

- Professionals did not give responses about disability groups or their accessibility needs sufficiently. Since disabled people cannot participate in social

life adequately, professionals may have limited opportunity to get to know many disabled people on a personal level. However, as 67.6% of those interviewed in the case study had received education in architecture, city planning or landscape architecture, they were expected to think on a human scale and to be able to interpret the concepts involved.

Three questions followed on the concept of accessibility as a design criterion. As with the disability concept, accessibility was not known by technical personnel sufficiently. Although a full and correct definition was not expected, interpretation could be made in the context of the survey. However, a small number of professionals understood the concept with its components as to be able to access and use (20% in total), to be able to have access everywhere and access independently.

'The necessary features of the accessible built environment' was another question. There were 30 answers about open spaces and most of the respondents mentioned ramps, which is a symbol of accessibility. The other commonly presented arrangements were about sidewalks and public spaces but no respondents handled the problem in detail about which accessibility requirements should be needed.

In buildings, elevators and ramps were thought again as a prerequisite for accessibility.

Some special implementations, on the other hand, like distinct routes or bus services have been suggested by professionals but they are contrary to the meaning of accessibility and mainstreaming design.

- Tackling all of the duties of planning, designing, controlling and enacting in relation to the built environment, interviewed persons' level of knowledge and familiarity of design approaches for all people can be criticised as lower than ideal.

- Only 22 different arrangements for the barrier-free environment were given so technical personnel could not point out detailed design requirements necessarily.

- No respondents mentioned barriers. The requirement for their removal or refurbishment did not occur to them.

The last question in Part I of the questionnaire concerned barriers in the built environment. Municipality personnel were expected to think about barriers located in their area of responsibility.

The most interesting findings came from this question. When the answers were grouped, it was found that barriers in different parts of the built environment were given but the sidewalk was evaluated as the only open space component. Though restrictive practices on sidewalk were mentioned 23 times in total, details were given by a few persons. The other areas including barriers stated by respondents were public transport and buildings.

The first significant conclusion was obtained when answers were grouped according to directorates. Personnel recognised the barriers in the general built environment but they were unaware of barriers within their areas of responsibility. Thus, while they were aware of some barriers, they supposed that these barriers were not related to their directorates.

The second important conclusion came into view as 'there is not any barrier in my responsibility area' given by 4 authorised persons.

As with topography and local planning problems, urban problems were other important answers. Moreover, a negative mentality and consciousness were accepted as barriers by technical personnel, as they surely had a negative impact on the built environment. Managers' insufficient knowledge, on the other hand, was asserted by respondents, two of whom were managers.

- It may be derived from these responses that accessibility matters were seen as the other's (other directorate's) problem by departments of municipalities whose work related to the built environment.

- Local characteristics like topography, current planning or urban problems of the area coerced local solutions for accessibility peculiar to this area.

- Coordination and collaboration was important for achieving accessibility in all of the life environments. A local authority is made up of different departments; however they should consult with each other for work and orient towards more user-friendly environments.

- Local authorities should find enough time to be aware that access is not a secondary duty. They should find enough time and effort to gain more information about accessibility and other new approaches.

Accessibility legislation embracing laws, regulations and standards were also asked of respondents. Indeed, these questions implied approaches of both professionals and municipalities as a whole. While laws and standards were recognised by a few respondents, a greater number of insufficient answers concerned regulations. Therefore, they may be implementing regulations in a traditional way that does not consider criteria for disabled people. Nevertheless, standards have crucial importance for the reason that they indicate detailed design features especially for disabled people. During implementation, measures, gradients, heights, widths etc. are so significant that 1 cm may change the feature of an accessible design.

- None of the respondents could give the title or subject of the Turkish Standard Institution's standards. Since regulations include merely basic design criteria, standards are needed in the process of planning, design and implementation.

- As authorised or technical personnel, none of the respondents had been informed about the sanctions of the People with Disabilities Act. Therefore, they were not in any activity according to the Law. The sanction issue may remain in the higher levels of the bureaucratic system.

6.1.2. Findings that relate to the Approaches of Municipalities

Answers about statistical data showed that municipalities' technical departments did not use any statistical or demographic data about people with disabilities living in their responsibility and duty area.

- Whatever municipalities did about the built environment, they did not plan these works according to basic data which indicates how much and what kind of services are needed by disabled people, which work has the priority, where the work is conducted and what implementation should be undertaken, etc.

Municipalities' work about accessibility formed the last part of the questionnaire. The first question revealed the municipality's general approach to proposals for affording accessibility. 82% of the respondents thought that the municipalities for which they worked accepted proposals for accessibility. One authorised person disagreed because of the hierarchy in the municipality and 5 respondents chose to answer the question with the option 'other'. These 5 persons

were working in the Directorate of Infrastructure and the Directorate of Development and City Planning. No difficulties were seen regarding proposals for access in the Directorate of Parks and Landscapes.

Not surprisingly, the question concerning special work about accessibility was answered by the Directorate of Parks and Landscapes positively. However, the rate of these answers was half of the total. In other words, the remaining bodies were not performing any special project for accessibility. While at least one special work was reported in 5 municipalities, most of the work (6 of a total of 9) was related to parks, playgrounds or recreational areas. Two other special projects were presented as work about construction of ramps.

- The approach of municipalities to accessibility was seen as rather partial and distant from the aim of creating accessible spaces as a whole life environment.

- Apart from the subject of special work, content and coherence seemed to be important. None of the technical personnel reported that Turkish Standard Institute's standards relating to disabled people were used in the municipality. Therefore, the criteria used in these open area projects are not known but it is clear that the standards referred by legislation were not utilised.

- The condition was the same for ramp projects. As the standards were not mentioned by the municipality personnel, constructed ramps should be examined in terms of their slopes, materials used, widths, location etc.

- Detailed information indicated that topography and urbanisation problems intensified as barriers in the municipality did not have any special work for accessibility.

The reasons for work that has not been applied and the absence of special work are important questions and the results gave information about the systems used by municipalities. The reasons suggested insufficient knowledge of technical personnel planning, applying and controlling, 30% of answers; insufficient knowledge level about standards, 26% of answers; and insufficient information about where assistance can be taken, 25% of answers. Unavailable data on the number of people with disability and their disability groups living in the region was other complaint topic. The other causes were too disparate to be

offered as alternatives. The other option was also popular for respondents who mostly criticised disability organisations' sufficient demands and pressures.

- All the causes concerning the absence or insufficiency of special work in order to provide accessibility in the built environment are important for future studies.

- Knowledge level was discussed as a factor in the process of creating inaccessible environments in early stages of the field survey evaluation. This was emphasised by municipality personnel as the current situation of disability and accessibility.

- There is not any attempt to change this situation and recharge technical personnel's knowledge about people with disabilities' needs and design considerations.

- Disability organisations' demands and pressures are expected by municipalities in order to prepare accessibility work. In Turkey, disabled people do not react against barriers hindering them from participation to urban life; however, accessibility is a duty and responsibility for municipalities. There is no need to be reminded by disabled people about their basic duties and responsibilities.

- Furthermore, while knowledge level and consciousness are not sufficient, example work and implementations by municipalities mentioned above should be discussed and evaluated in terms of having accessibility criteria.

The last evaluation regarded the routine work of municipalities. Municipalities declared that they considered the accessibility needs of people with disabilities in their work at the rate of 91%. Directorates asserted that accessibility was one design and plan criteria used in all of their routine work which included all the building architectural projects, new and revised projects, sidewalks, landscape projects, all the parks and landscape projects etc. When accessible principles related to such work were interrogated, the answering rate nevertheless decreased in this question, other than those from the Directorate of Parks and Landscapes.

Elevators and ramps for buildings, sidewalks and parks were the most popular design considerations in the routine activities of municipalities.

Reasons for being unaware of the needs of people with disabilities in routine work were asked to municipalities as well. The answers focused on large

scale plans accused of not having taken into consideration the necessary measures for accessibility. In this respect, the interviewed directorates could not be accused of lack of awareness as the rate of 41% suggested. On the other hand, 29% of interviewed technical personnel thought that there were not any legislative arrangements forcing accessibility in Turkey.

The most popular conclusion was repeated once more as knowledge level at the rate of 23% on average. Insufficient knowledge about standards, insufficient knowledge of technical personnel responsible for planning, application and control were the given causes for the question.

6.1.3. Findings concerning the Comparison of Technical Departments and Disability Units

Part I of the questionnaire about the main concepts was answered by all the 6 disability unit respondents. Disability was traditionally defined with difference, incapability, deficiency and impairment by disability unit personnel as did the technical personnel. Only one authorised person mentioned insufficient social attention. Handicap was also evaluated in the same way, apart from a single response including physical and social barriers. Disability groups, on the other hand, were defined more consciously. In the case of mobility limitation, half of the respondents saw the restrictive matter as disability itself. One respondent suggested barriers as the cause which made all of the people mobility limited. Other groups were made up of disability groups.

- Disability unit personnel thought of disability in the traditional way and they approached the issue with the medical model. Therefore, their services and work certainly reflected this approach.
- Handicap was not evaluated as a situation stemming from existing barriers, and as a result, it was not expected to remove or refurbish these barriers from these units.

Questions concerning accessibility were important for the reason that the units declared that they were working on accessibility in the built environment. A few answers referred to mean of accessibility appropriately. On the other hand, answers about accessibility arrangements were parallel to technical responses and ramps and elevators were the most popular accessibility components. On the other hand, a few number and variety of barriers were mentioned.

- Although disability unit respondents worked for disabled people and communicated with them, they had insufficient knowledge about accessibility concepts and requirements.

While the People with Disabilities Act was known by the authorised persons of the disability unit, other legislation about accessibility for disabled people in the built environment was not familiar to them.

- Disability unit personnel were more familiar with the People with Disabilities Act than technical personnel, but they did not have information about accessibility legislation or standards. For this reason, they did not use appropriate design criteria in their accessibility work.

It is reported that statistical data exists in disability units in differing quantities with some demographic information such as the number of disabled people, disability groups, age, gender, education and employment situation, and demands of people with disabilities. However, this data is not mapped and cannot be used in spatial works.

- Technical personnel do not have any information about data which is provided by disability units. It is apparent that this data is not used by other departments of municipalities, at least by technical departments.

The question about municipalities' attitudes towards project proposals is answered in affirmative way. The project subjects are the construction of elevators on over-crossings, park arrangement and modal street study, two of which are not reported by technical directorates.

- It can be asserted from these answers that projects about accessibility are carried out as a distinct work by disability units.

- There are insufficient works planned and realised about the built environment. Even though these units have some information related to disabled people, they have not as yet utilised this information in spatial works.

When the reasons for the non application or absence of special works are queried, refusal of authority, infrastructure changes and insufficient knowledge of technical personnel who are responsible for planning, applying and controlling

projects are mostly given by respondents. Under the other titles, two more issues concerning ignorance of consultation with disability units and authorised persons' avoidance come to the fore.

- Disability unit personnel mostly complain about authorised persons' attitudes towards their units' work. They also mention about insufficient knowledge level of technical personnel like respondents from technical department.

- In addition, two more conditions appear inherent to disability units in that they also complain that technical departments and authorised persons are ignorant of their units. Disability unit personnel think that they should be included in discussions about works concerning the built environment and that they should be invited to advise accordingly.

6.2. Conclusions

The conclusions of the thesis and some suggestions are grouped according to their relevance to the fields as;

1. knowledge and consciousness level
2. legislation
3. institutional structure
4. attitudes of local agencies

6.2.1. Conclusions about Knowledge and Consciousness Level

Social exclusion, oppression and discrimination towards people with disabilities continue in societies all over the world, even though their amount is variable according to the local social and cultural life. Problems of exclusionary implementation are still experienced by disabled people in Turkey, too.

Disability is not a medical issue anymore. In the past, societies have avoided the disability matter and this only served to intensify the problems. Since all people are considered equal and have the same rights as a human being, it is the duty of society to equalise life conditions for everybody.

The focus should shift from addressing the deficiencies and inabilities of disabled people to the deficiencies and inaccuracies in societies. Disability should not be defined by emphasising 'impairment and individual' but by stressing restricting and hindering 'barriers' and 'social organisation'. Societies should recognise that they cause a disabled person to become handicapped. In spite of

definitions in the laws reflecting medical approach in the UK and Japan, these two societies have considered the issue and brought discussions and solutions into the political and social agenda in a social manner. In addition to efforts to remove current barriers, an impressive development has been processed. For a necessary development in Turkey;

- Firstly, conceptualisation of disability should be examined in legislation and state policies, and medical approaches to tackling disability should be excluded from official implementation. As the issue falls under the responsibility of several bureaucratic units, revision should be made as a whole. If disability measurement is undertaken with a medical approach, it would not be meaningful to expect it to be perceived by local agencies, or any other governmental bodies, in a social manner.

- The definition ought to to focus towards environmental conditions rather than individual's conditions.

- A social/rights based model of disability needs to be a current issue throughout the social and administrative system of a country. In other words, this approach must not be implemented as an order by the highest level of hierarchy to the community and governmental system. This should be a process which evolves over the time.

On the other hand, accessibility and full participation to society can only be achieved if the physical and social environments are transformed together. If physical accessibility is practiced without eliminating society's exclusionary attitudes and behaviour towards disabled people, access to social life signifies nothing for disabled people. Indeed, the two dimensions feed each other not only affirmatively but also in negative manner. Social viewpoints will change when disabled people become visible in community life though an accessible built environment, which enables people to engage with each other and to accept each other as 'normal' instead of 'different'. However, if a person with disability faces a barrier in a public realm, and fails to succeed in moving around easily, he/she may not want to go there again and people witnessing this experience may develop attitudes of pity towards disabled people as if he/she is in need of help.

Dis-able and able is/are not two distinct parts of the community life. There is no need for a bridge between these two sides. A community for all has to be provided.

The findings of the field study in Ankara-Turkey show that technical professionals are interpreting disability in a traditional, medical approach and have not sufficient and scientific knowledge about disability. They do not evaluate the disabled person and environment together, too.

- Disabled people need access to ableist society/space, and space should be immediately put into the focal point of the exclusion discussion. This may be encouraged by academic environments and the education process, by the bureaucratic system and governmental agencies, local agencies especially and by disabled people themselves.

- Academic educational processes ought to undergo an evaluation and evolution process for all programmes related to the built environment. According to the field study results, professionals have not been educated about disability or interacted with a disabled person, so they have not any scientific and contemporary knowledge about disability and space-disability relations. They need to be aware of the fact that designing for the average person is a thing of the past.

6.2.2. Conclusions about Legislation

In Turkey, it is apparently seen that legislation and standards are not implemented completely. As long as the development of accessibility can only proceed slowly or cannot be realised, legislation can be criticised for its weak construction. Moreover, according to the field study, legislation and standards concerning accessibility are not known by local agencies. On the other hand, standards including measures and provisions for accessibility are not compulsory unlike building codes in the UK and Japan.

- In Turkey accessibility standards must gain a similar status with compulsory standards and enforcement of regulations concerning fire prevention and the use of elevators.

Following the Turkish Disabled Persons Act, local authorities are required to conduct many special improvement projects and to develop programmes to refurbish spaces. The field study indicates that they have not any information or anxiety about sanctions included in the Act.

- The Acts ought to include penalties in Turkey. However in the bureaucratic system, it is debatable whether penalties will be effective, or not.

- In Turkey, as accessibility legislation does not include detailed measures and qualification, standards should be used in order to achieve good practice. It can be said that, standards will only be applied on they become compulsory, as mentioned above.

- Legislation needs to be revised with the approach of tackling disability issues and the environment together rather than as separate entities. This is necessary in order to implement accessibility criteria in the built environment with the approach of being handicapped as the result of barriers.

- Legislation needs also to be clear and sufficiently detailed so as to limit the opportunity for different interpretations for implementation.

- Another suggestion may be to develop accessibility policies at both the national and local level for legislation to be effectively implemented. For example, action plans have been developed and implemented in the UK and Japan in order to realise articles written in the laws. In Turkey, there is not a comprehensive action plan for accessibility that relates to current conditions encountered in the bureaucratic system.

- In the UK and Japan, legislative arrangements have been revised in order to answer current needs. In this respect, it can be said that legislation should be handled in order to meet the demands of disabled persons and enhance their rights in Turkey, too.

- Legislation ought to permit and encourage production of innovative technological equipment for accessibility. Tax exemptions and incentives may also be provided for organisations that incur additional or exceptional costs associated with the implementation of their accessibility action plans and innovation in the field.

6.2.3. Conclusions about Institutional Structure

In the Turkish bureaucratic system, professionals have distanced themselves from new debates or seem to have forgotten that some necessities stem from their professions. Professional people suppose the planning and design process only as applying a part of a regulation and urban development requirements. Indeed, they are seen as being blocked off by routine works and they should be re-educated for new issues.

- Planners, architects, landscape architects and other professionals related to design and building space ought to find the opportunity to discuss the built environment in order to develop the transformation from inaccessibility to accessibility. They also need to interact with disability organisations and disabled persons personally.

- According to the field study, professionals know ‘disabled person’ as a term but not a concept. Therefore, able-bodied professionals may interact with people with disabilities to understand the needs of dis-abled people. They also can be encouraged in order to understand that their works gain meaning only when used by everyone.

Some other important conclusions can be also derived from the field study. Authorised persons and technical personnel in local governments do not have sufficient knowledge about accessibility legislation relating to existing and newly constructed areas, in addition to the disability issue in general. Interviewed personnel’s hesitation to respond to the questionnaire may be sourced from this insufficiency in their knowledge and experience.

Local government personnel know disabled persons as a term; nevertheless they do not know the Laws, Regulations or Standards by name. Personnel from all levels should be trained about accessibility legislation and standards immediately. This training programme should include theory and practice of the issue and give examples from model countries.

Local government’s different departments are aware of some of existing barriers in their responsibility areas; however they hold that these barriers are outside their duty and field.

- Directorates working on the built environment need the consciousness that there are a variety of barriers in their duty or field. Even if it is true that there are barriers only in other Directorates’ responsibility, all departments need to recognise that accessibility can only be achieved when all of the life environments and functions become accessible. For example; to provide an accessible entrance for a building may be in the duty of Directorates of Development and City Planning, however, it can be used by a wheelchair user only if the pedestrian area in front of that building is suitable for mobility, which is the duty of another directorate – the Directorate of Infrastructure.

As with technical departments, there is a communication gap between disability units and technical departments, which is a finding of the field study.

- Collaboration and coordination is needed between technical departments and disability units. As disability units have statistical data about disabled people especially, they will be useful for technical departments' future programmes and works that are relevant to accessibility.
- Albeit it is difficult in the bureaucratic system in Turkey, county municipalities and greater municipalities may collaborate and at least coordinate their work concerning disability and accessibility with the consciousness that the issue be handled for the whole life and built environment.
- Central government needs to force coordination among local agencies in greater municipalities by using instruments like coercive legislation, control mechanisms and supportive activities like meetings and workshops.

In the UK and Japan, accessibility is mainly handled by central government which designates politics and vision related to accessibility and uses many institutional mechanisms to achieve local agencies' implementation.

- In Turkey, since space is shaped by local agencies mostly, central government should have a mandatory and encouraging role in accessibility implementation.

6.2.4. Conclusions about Attitudes of Local Agencies

In Turkey, disabled people are treated as different, unable, incapable or from the viewpoint of being dependent. As declared by interviewed planners**,** architects, landscape architects and other professionals and authorised persons working on built environment, the field study provides ample evidence for this situation. Spatially, society can exclude disabled people in two ways; first with special segregationist residences and second with inaccessible space organisation. In these two exclusive ways, people with disabilities are prevented from participating in social life as necessarily as it should be. The second situation is mostly being followed in Turkey.

Accessibility in the built environment is one of the fundamental principles of integration. In order to achieve accessibility, existing barriers should be identified and thereafter the improvement or elimination of these barriers should be realised. At the same time, development and renovation areas should be constructed in an accessible way. For this dual implementation the four components of the built environment; open areas, buildings, public transport services and information facilities should be assessed distinctly.

Accessibility also includes some design criteria, such as safety, comfort, convenience, self control, right choice, functionality and dignity of disabled people, all of which should be provided sufficiently.

- One of the ways to eliminate exclusion is for disabled people to be able to reach and use all the utilities in society. For a temporary solution, additional compensation ways can be used such as a ramp constructed adjacent a stair or a hydraulic frontal elevator installed to a building. However, after this period, accessibility requirements should be a part of mainstream planning and a design consideration and flush access entrances and interior elevators after two storeys should be the part of construction process.

- Just as technical solutions can provide accessible solutions, they can be used especially in constructed areas. However, in new works, the primary consideration should be for an architectural solution.

- Implementation is the important process after planning and design. Professionals neglect user-friendly environment and detail problems stem from implementation, thus they should take part in this process.

Model countries and cities should be selected and investigated by Turkey. The UK and Japan, for example, are two examples of successful countries in terms of addressing accessibility and eliminating social exclusion in the community. However, historical background impinges on current circumstances so it is not a proper attempt to bring the same laws, regulations, standards and implement the same programmes. In contrast,

- It may be useful to understand and consider the logic of the development process about creating accessible built environments in the UK and Japan.

Local agencies mostly report that they use accessibility provisions in routine and daily works. The reasons for not (sufficiently) considering the needs of disabled people in these routine works focus on the planning process. Large scale plans are accused of not taking necessary accessibility provisions and technical departments suggest that they cannot adapt the measures to small scale plans.

- Indeed, accessibility requires high level of planning consideration so personnel may be correct in their interpretation. However, this situation could have been changed by revising large scale plans.

- Routine works may be investigated in detail to determine to what degree accessibility requirements are implemented because personnel do not have sufficient knowledge about how accessibility can be implemented and what are the related standards.

Most of the special works on accessibility are declared as parks and open area arrangements.

- Local authority personnel ought to recognise that their duty is to plan or design accessible transportation, urban facilities and accessible housing rather than just providing ramps for wheelchair access.
- In addition to other technical personnel having general accessibility knowledge, a person may be specially charged within the accessibility duty.
- As routine or special works, accessibility provisions in renovation and improvement areas must included in future programmes.
- Special projects should be integrated into other works other than special and separate urban facility areas.
- Local solutions for accessibility need to be developed along with local policies and programmes. This is because different places may require different policies to cater for local expressions of need. Some urbanisation and planning problems such as slum areas, illegal constructions, protection areas, topographic conditions etc. are good candidates to be considered in accessibility programmes.
- Local guidelines prepared by local governments may be implemented by service providers.
- To start accessibility practice, municipal and other public buildings may be designated as model areas for improvement.
- People with disabilities should participate in planning and design process to give information about perception and experience of space.
- At the local level, demographic and statistical data are needed. In this investigation, the needs of people with disabilities living there ought to be identified in order to plan future works.

In any attempt to afford accessibility, some resistances and oppositions may be faced. The causes of these may vary from perceptions arising from the costs or hardships entailed or simply a resistance to addressing a new issue.

- These causes of resistances and oppositions should be examined locally and solutions should be discussed.

To overcome disparity and to complete defined implementation is not an easy process. This development has been achieved in the UK and Japan in some degree which is still criticised in terms of not being realised adequately and not providing full participation of disabled people in social life. However, this shows that accessibility is on the agenda in these countries. Continual discussion and evaluation, struggle and protest throughout the process have all contributed towards the considerable development in accessibility in the UK and Japan. Nevertheless, in Turkey the historical background is rather different. Rights have been given to people with disabilities by the State. Disability organisations have not struggled for accessible environments sufficiently and even demanded legislative duties for implementation from local agencies. Today, these non governmental organisations still wait for local agencies to put in practice seven-year sanction of the Act.

- Organisations of people with disabilities should be strengthened but not with the help of the State or local government agencies which provide social support for disabled people and organisations currently.

- It should be recognised that in the UK and Japan, disabled people organisations have worked with the State not only in the period of preparing the Act, but also in the process of implementation of this Act.

- Disability organisations, on the other hand, may place pressure on central government to make necessary provisions and define necessary measurements for accessibility. In the UK and Japan, once central government undertakes the disability issue, pressure for implementation tends towards the local agencies. Dissemination of the benefits of the implementation of accessibility is also increased by local effects.

Disability and accessibility in the built environment are new issues for Turkey. In the last decade, with the establishment of Administration on Disabled People several advances have been realised. However, nowadays, as can be derived from the field study, accessibility works still focus on partial attempts, which constitute a small part of an urban area. As a great amount of change is need in space, more integrated and broader methods are needed to assess progress. Moreover, solving accessibility problem are dependent on solving other urban and planning problems. For instance; if car parking problems are not solved, the obstruction of many sidewalks will continue. As a result, this situation will continue to restrict or hinder mobility for everybody. One more example can be

given about traffic planning. If high speed traffic uses a city centre, pedestrians will be forced to use over-crossings which are not suitable constructions for mobility limited people. Conversely, pedestrianisation may be a solution for accessibility in a city centre.

Therefore, inclusive solutions should be found in planning by consulting people with disabilities. It should not be forgotten that planning and design are not only physical considerations, they area also social considerations and disability is socio-spatially constructed. As barrier-free living is a civil right for all, to be able to access anywhere is not a duty or responsibility for individual, however to provide access for anyone to anywhere is the duty and responsibility of the societies and institutions managing them.

It is thought that some of the main findings of this study could be used in future studies. For instance; local conditions and urban development problems and their effects on accessibility works or a comparison of local agencies' attitudes located in rural areas could be considered as future studies.

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APPENDIX A

SURVEY FORM

NAME OF MUNICIPALITY:

DUTY OF PERSON IN MUNICIPALITY APPLIED SURVEY: .....

PROFESSION OF PERSON: .....

If the survey is applied to a Disability Unit:

a) Name of the unit; .....

b) In this unit, is any work made about built environment and providing accessibility for people with disability?

□ Yes □ No

UNIT FOR PEOPLE WITH DISABILITY/ OTHER DEPARTMENTS

I. DISABILITY AND ACCESSIBILITY

1. What do you think about disabled, please define?

.....

.....

2. How many disability groups are there, please list?

.....

.....

.....

3. What is mobility limitation? Who is involved in this group?

.....

.....

4. Who is handicapped, please define?

.....

.....

.....

5. What are the needs of people with disability in the built environment, please list?

.....

.....

.....

.....

6. What is accessibility, please define?

.....

.....

7. What kind of arrangements should be made in built environment in order to provide accessibility?

a) In open spaces: .....…

.....

.....

b) In buildings: .....

.....

.....

c) In public transportation vehicles and systems: .....

.....

.....

8. What are the most important barriers for accessibility of people with disability in your municipality boundaries? (Please list according to their importance)

.....

.....

.....

II. LEGISLATION

9. Which **laws** do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?

.....

.....

.....

10. Which **regulations** do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?

.....

.....

11. Which **standards** do you have knowledge regarding arrangements aimed at providing accessibility for people with disability?

.....

.....

.....

.....

III. STATISTICAL DATA

12. Is there any statistical and demographic data about people with disability living in your municipality area (how many people with disability live, what are the disability groups, ages, gender, education and employment situation, etc.)?

□ Yes □ No *(go to question 15)*

13. What kind of data is available?

.....

.....

.....

14. Has this data been mapped?

□ Yes □ No

IV. APPLICATION OF ACCESSIBILITY PRINCIPLES

15. According to you, are project proposals about providing accessibility of people with disability accepted in your municipality?

□ Yes *(go to question 17)* □ No □ Other

16. According to you, what are the causes of rejection of those project proposals?

.....

.....

.....

.....

17. Are there any special work, planning or arrangement/application on accessibility for people with disability that have been made by your municipality?

□ Yes □ No □ Other

18. What are subjects, contents and measures, and completion grade of those works done, please list.

a) Subject: .....

Content: .....

Measures: .....

.....

.....

.....

.....

In which grade has the work remained?

□ Thought □ Project is done □ Applied

b) Subject: .....

Content: .....

Measures: .....

.....

.....

.....

.....

In which grade has the work remained?

□ Thought □ Project is done □ Applied

c) Subject: .....

Content: .....

Measures: .....

.....

.....

.....

.....

In which grade has the work remained?

□ Thought □ Project is done □ Applied

(For additional works, extra paper can be used)

19. What are the causes of the works that has not been applied and causes of any special work that has not been made?

- ☐ Authority has refused
- ☐ There is not disabled population which necessitate this application
- ☐ There is no available data on the number of people with disability and their disability group live in the region.
- ☐ Since the infrastructure changes frequently, it is unnecessary to make application (it will be upset anyhow)
- ☐ Applications are quite expensive; so they are not preferred to be done.
- ☐ There are some financing problems
- ☐ What should be made for providing accessibility is not known
- ☐ There is no sufficient knowledge about standards which are necessary for application
- ☐ It is difficult to reach the standards
- ☐ Technical personnel is not enough
- ☐ Technical personnel who are responsible for planning, applying and controlling do not have sufficient knowledge.
- ☐ It is not known where assistance is taken
- ☐ Other *(please explain)*

.....

.....

.....

.....

20. In development plans, urban designs and landscape architecture projects (or works of your department) prepared by your municipality, are needs of people with disability considered?

☐ Yes ☐ No *(go to question 23)*

21. Which development plans, urban design and landscape architecture projects (or works of your department) consider needs of people with disability? *(Please explain*)

.....

.....

.....

.....

22. In those development plans, urban design and landscape architecture projects (or works of your department) considering needs of people with disability, what kind of principles are there?

.....

.....

.....

.....

23. In (these) development plans, urban design and landscape architecture projects (or works of your department), what are the causes of **not being considered/not being sufficiently considered** needs of people with disability?

- ☐ Authority has refused
- ☐ There is not disabled population which necessitate this application
- ☐ There is no available data on the number of people with disability and their disability group live in the region.
- ☐ Because necessary measures have not been taken in large scale plans, then it cannot be adapted to small scale plans.
- ☐ Since the infrastructure changes frequently, it is unnecessary to make application (it will be upset anyhow)
- ☐ Applications are quite expensive; so they are not preferred to be done.
- ☐ There are some financing problems
- ☐ When work is made with tender bid, firms do not want to do application
- ☐ What should be made for providing accessibility is not known
- ☐ There is no necessary legislative arrangements in Turkey
- ☐ There is no sufficient knowledge about standards which are necessary for application
- ☐ It is difficult to reach the standards
- ☐ Technical personnel is not enough
- ☐ Technical personnel who are responsible making planning do not have sufficient knowledge
- ☐ Technical personnel who are responsible making application do not have sufficient knowledge
- ☐ Technical personnel who are responsible making control do not have sufficient knowledge.
- ☐ It is not known that where assistance is taken
- ☐ Other *(please explain)*

.....

.....

APPENDIX B

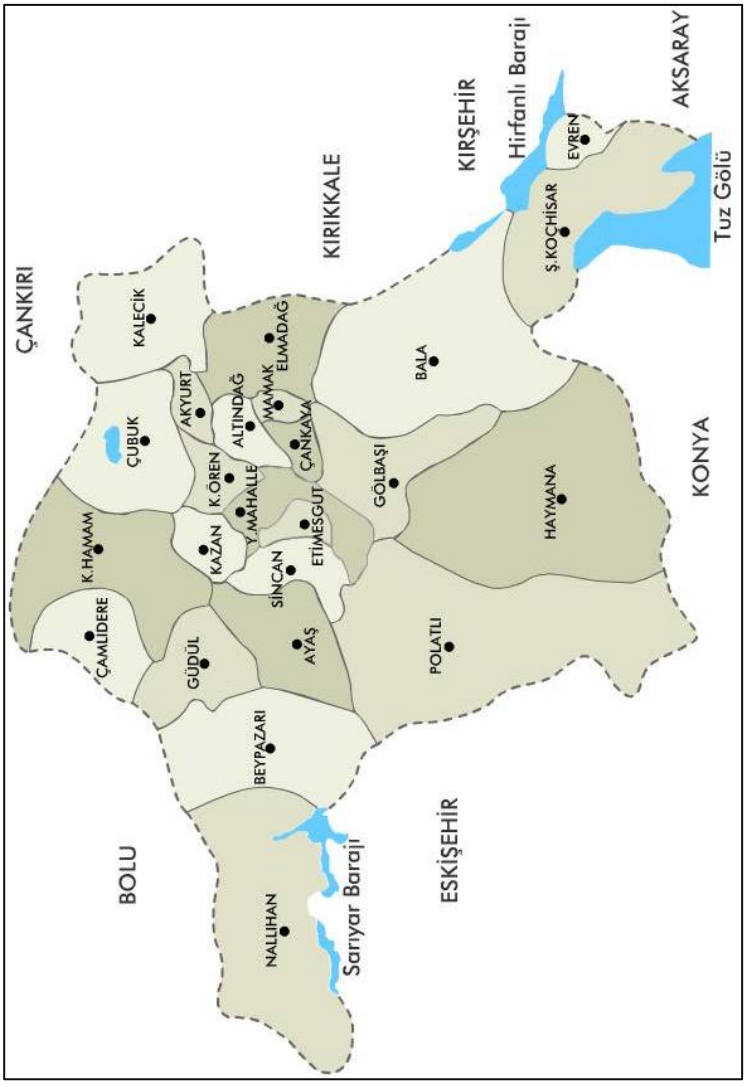

Figure 25: Map of defined case study area

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name : Çağlayan Gümüş, Deniz
Nationality: Turkish (TC)
Date and Place of Birth: 3 June 1974, Gerze/SİNOP
Marital Status: Married
Phone: +90 312 229 55 11
Fax: +90 312 229 55 85
E-mail: denizcaglayan@superposta.com

EDUCATION

Degree Institution Year of Graduation
MS, METU Graduate School of The Graduate School of Natural and Applied Sciences, Department of City and Regional Planning, 1999
BS, Gazi University, City and Regional Planning 1994
High School of Gerze, Gerze/SİNOP 1990

WORK EXPERIENCE

Year Place Enrolment
1998- Present Prime Ministry, Administration on Disabled People, Expert on Disabled People

FOREIGN LANGUAGES

English

PUBLICATIONS

Çağlayan, D. (2001). Geleceği planlarken geleceğin kentlerinde özürlüler. In *Şehir Plancıları Odası 24. Kolokyum.* Ankara: Ünal Offset. pp: 144-148.

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