

The Investigation of Municipal Buildings and Their Environments in Ankara with Regard to Turkish Standards Related with Accessibility

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ABSTRACT

The main problem in this study is that the handicapped people are not able to use the public areas of public building without the help of others due to the built physical environment. In order to exist in the public areas and be included in social life, every person should be able to attend to public areas and have the right to access the services given by the public buildings. This is directly related by the compliance of these public buildings and their near surroundings to the Turkish standards TS 9111 and TS 12576 related with accessibility to the built environment for the handicapped. In the research made for the M.S. Thesis which is the base of this article, five of the many public buildings in Ankara chosen form municipal services buildings (M.S.B.) are evaluated with regard to the Turkish standards related with accessibility. Data collection thorough observations and photography was made through forms prepared for every activity areas in these buildings to determine the deficiencies that cause lack of accessibility for the handicapped. Through these evaluation forms, the accessibility value (A.V.) for every activity area of these public buildings was determined. Also the general accessibility value (G.A.V.) for the five different municipality buildings was determined. In preparation of this article only two of the forms related with Accessible Route from public transportation areas and the Informative Signage were chosen in as the main focus of this article. As a conclusion the compliance to the standards of the near surroundings of these buildings are not only related with the built physical environments and the architectural obstacle but also is related directly with the topographical status of the building site and the neighborhood and setting these buildings are located. Also the deficiencies in signage with regard to the Turkish standards could easily be refined through minor efforts and should be easily perceptible and simple and understandable by more than two senses and also be compliant to the related Turkish Standards if any of these public areas are to be accessible and usable by handicapped people without the help of others and sustain the design for all principle in built environment.

Key Words: Public buildings, accessibility

1. INTRODUCTION

The accessibility of the physical environment should be sustained for every handicapped person in order to be informed about and achieve all services, preserve all personal rights, attend all meeting to defend their rights as freely and without help from anybody else, as any able-bodied person would. Today, in Turkey, the problem of handicapped people not participating and

using the open public spaces or not being able to receive services offered without the help of another person due to constraints caused by physically built environment has not been solved.

The research carried out on the problems and expectations of the handicapped throughout the period between 2015-2013 in which realization of accessibility had become a state policy, has shown that many

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problems still exist and the public spaces are still not efficiently used by the handicapped users. The problems encountered by these individuals cause a decrease in user satisfaction about these public spaces. Along with that because of the major revisions that took place in the standards that regulate the physical environmental needs for the handicapped users throughout this period was a main motivation for the researcher to investigate the application of these standards in existing public areas. There was a need for means of evaluation and devices of measurement of the existing public buildings and their near environments with regard to Turkish standards related with accessibility.

The objective in designating the obstacles in physical environment is to determine the problem sources causing the buildings and near surroundings, that are used by everybody in the society, to be inaccessible by physically handicapped people, elderly, children, pregnant women, women with baby carriages, too tall or too short people and also including people carrying things, without exception. The aim is to observe the architectural obstacles at existing buildings and near surroundings and to determine the problems, propose methods of determining these problems and prepare solutions to the deficiencies in design process and construction phase of these environments with regard to the newly updated Turkish Standards related with accessibility.

Buildings and their near surroundings are products that have to be designed with principles based on basic user needs. In today's world, social responsibility dictates that all products that are used by everybody in the world should be designed regarding "design for all" and "universal design" principles. Since 1950's this understanding of design started in 1950's evolved and used for the first time as a new concept of "universal design" by Ronald Mace in 1985. Mace describes "universal design" as; *"the concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life"* [11]. In recent years universal design has started to be explained as a social responsibility project, humanities duty to the world, design appreciating differences in human beings, inclusive design and ethics of cooperation. "Accessible Design can be defined as the design of facilities, products, and services that specify legal mandates, guidelines, or code requirements with the intent of providing accessibility to the entities for individuals with disabilities." [3] Studies on Accessibility aim to implement legal obligations to have the physically built environment are built with regard to universal design principles.

All building should be designed and built for all people without discriminating any user types. However, the existing condition usually disregards the needs of the disabled people and the designers and decision makers on this design omit the fact that every individual has the right to use all physical environments and access all services provided by all buildings. This shows the importance of implementing the regulations on Accessible design to all design studies.

In this study Municipality Services Buildings (M.S.B.) and their areas of public services are selected as the research area among public buildings as these areas are an important types of spaces where people interact with the public services in daily basis for mainly payments, complaints, access to services and aids given by the municipality. The issue of reaching those services freely without obstructions for a handicapped person and people with mobility constraints is considered as the most important aspect of inclusion of the individual to the social life and solve one's own problems without the help from others. This is not the only measure in this inclusion process but an important level in social interaction. This research is also intends to give an example for other public areas and services for evaluation of their own service areas regarding the Turkish standards related with accessibility.

There are many different definitions on public spaces and public areas. Habermas defines public space as *"An area of life defined by appliances, processes and spaces where people come together to brain storm about a common matter related with them, get in a rational discussion and through that achieve a common opinion to form the public opinion on that matter."* In daily life the term "public" implies the government and its services. Public spaces are understood as buildings owned and managed by government where public services are given. Regardless of the owner, manager or the limits of public spaces, they should be understood as open or confined spaces which are built to conform the needs of all people without discrimination or restriction [10]. Habermas defines government as the public power. Public building is common spaces not only because they are open to all people but also should be based on the principle of public interest and benefit. The most important issue is not "where" the public space is, but "how" the public spaces are. [11]

The Selected M.S.B's in this research and their planning schemes are as follows; as the governing schemes of the municipalities are different from each other, their formations are varying. There are types of plan organizations where presidency section is directly related and interacting with administrative offices and also there are types of plans where it is separated. Most significant of such planning was observed in Keçiören .S.B., where the vice president offices are situated near the administrative offices of which he or she is responsible from and separated from the presidential quarters. Altındağ, Mamak and Etimesgut M.S.B. are planned in a way that the presidential offices are situated in a smaller separate block near the administrative offices. Yenimahalle M.S.B. I a consolidated facility where presidential offices res situated in 2 floor of the main building. These variations effect the external accessible routes and the amounts of entrances of each building to differ and are evaluated within their properties.

Another important issue that effects the functional planning schemes is that the buildings are planned as municipality service buildings or if they are converted from an existing facility to this function. Yenimahalle M.S.B. was originally designed as a wholesale market

and was converted to today's function after many renovations. Service are open to public within the courtyard of the building at ground floor level were originally shops. And the service ramp to the each floor was converted in to a theater and conference room. Another main function; wedding hall section in Altındağ, Yenimahalle and Etimesgut M.S.B.'s are situated within the main building but opened to public from separate entrances. Car parking areas in Altındağ, Yenimahalle, Mamak and Etimesgut M.S.B.'s are designed as closed areas whereas Keçiören has an open car park near the building in the garden.

In evaluating of these five M.S.B.'s and their near surroundings, the green spaces, public transportation points, the main and alternative entrances are evaluated within related forms and all pedestrian walk ways connecting these buildings and activity areas are considered within their unobstructed accessible routes and evaluated in than manner. Open and closed car parks are evaluated separately. Every building that had at least two entrances one of them presidential entrance, other public services entrance were evaluated separately and with their related forms.

Other evaluation criteria's mentioned In the TS 9111 and TS 12576 such as raised crossing, lowered crossings, public telephones, trash bins, public toilets, water fountains, and connections to railroad facilities were not evaluated as every facility did not have any or either of them.

In scope of this paper with regard to external accessibility, actual usage of the buildings as M.S.B is accepted to require full accessibility of the car parking areas; internal courtyards, main and alternative entrances and the public services provided at these places are considered as the most important evaluation criteria.

In Turkey, the standards regarding the needs of the disabled people are TS 9111 and TS 12576 have been revised in 2011 and 2012 respectively. In this study, these standards are accepted as the applicable regulation and are used as the evaluation criteria for the selected buildings and their near surroundings. This article was prepared from the M.S. Thesis "The investigation of Municipal buildings and their environments with regard to Turkish Standards related with Accessibility" (Gazi University Graduate School of Natural and Applied Sciences, Program of Architecture, M.S. Thesis, August 2013) [1]

Starting with the implementations on physical environment and the regulatory improvements led by "The World Program of Action concerning Disabled Persons" of the United Nations in 1982[13], In Turkey, with the acceptance of Law No: 5378 in 2005, an initiative on the social security rights of the handicapped people, their healthcare needs, rehabilitation, education and measures on how becoming handicapped for people can be prevented started to be an main issue of discussion and action. In this law the temporary article no:2 states that "All existing buildings of all government facility and

institutes, all roads and pavements, pedestrian crossings, open areas and recreational areas, sports facilities and other related social and cultural infrastructure along with all community areas and services that belong to natural and legal persons shall be made accessible by the handicapped people, within 7 years after the acceptance of this law".[6] In the year 2012 this article has been altered and "7 years" have been changed to "8 years".[14]

The Accessibility action plan of the government (2010-2011) has undertaken the issue of updating of the Turkish standards related with accessibility. TS 9111 (1991) and TS 12576 (1999) has been revised and altered according to the needs of the disabled people in 2011 and 2012 respectively. TS 9111 (1999) was especially concerned about the "residential houses" of the handicapped people. The altered version in 2011 has changed its scope and understanding of handicapped accessibility so that the revised version "the lack of mobility" as an important addition to the standard. This enlarges the types of users from "people in wheelchair" to all people in lack of mobility due to handicap, aging, overweight, very tall people; very short people, and pregnant women and also women with baby carriages. The improvements made to TS 9111 (2011) enabled a variety of alteration possibilities based on accessibility in public buildings.

The other alterations included in TS 9111 (2011) are the inclusion of the chapter related with the informative signage and the additions to the alarms section. The panic exit route is also considered as an important accessibility issue in case of emergency and is mentioned in detail how the emergency rescue areas should be formed in design of buildings. The main unit is converted to centimeters (cm) instead of millimeters (mm). The improvements made in TS 12576 (2012) are based on the main principles accepted on revisions in TS 9111 (2011). Main differences in descriptions between two standards were corrected. The usage of terms "independent movement", "comfortable reach", "secure environment" and "unobstructed space" were mostly used to define the requirements from the built environment so that both standards understand the user type as not only handicapped people but also "all people with mobility constraints".

2. METHODOLOGY

This article is based on the method used in the M.S. Thesis "The investigation of Municipal buildings and their environments with regard to Turkish Standards related with Accessibility" (Gazi University Graduate School of Natural and Applied Sciences, Program of Architecture, M.S. Thesis, August 2013) [1]. The method is collection of data through investigation, observation and evaluation of the physical environment in selected municipal public service areas in Ankara with regard to evaluation forms based on the Turkish Standards TS 9111 (2011) and TS 12576 (2012) related with accessibility. The data received from these forms has been the main base of evaluation of these public spaces and the source of the results and proposals for solutions to the problems observed regarding the

accessibility of handicapped people and people with mobility constraints.

In this research the central municipal buildings and their service areas of the five most crowded areas of the city of Ankara, which is the core of public power in Turkey, were chosen as they inhabit the highest number of

handicapped population. Five different service areas of five municipality building are examined in the research with regard to Turkish standards related with accessibility in order to determine the accessibility value (A.V) of these spaces and provide feedback to designers on the problems observed on living active public areas observed.

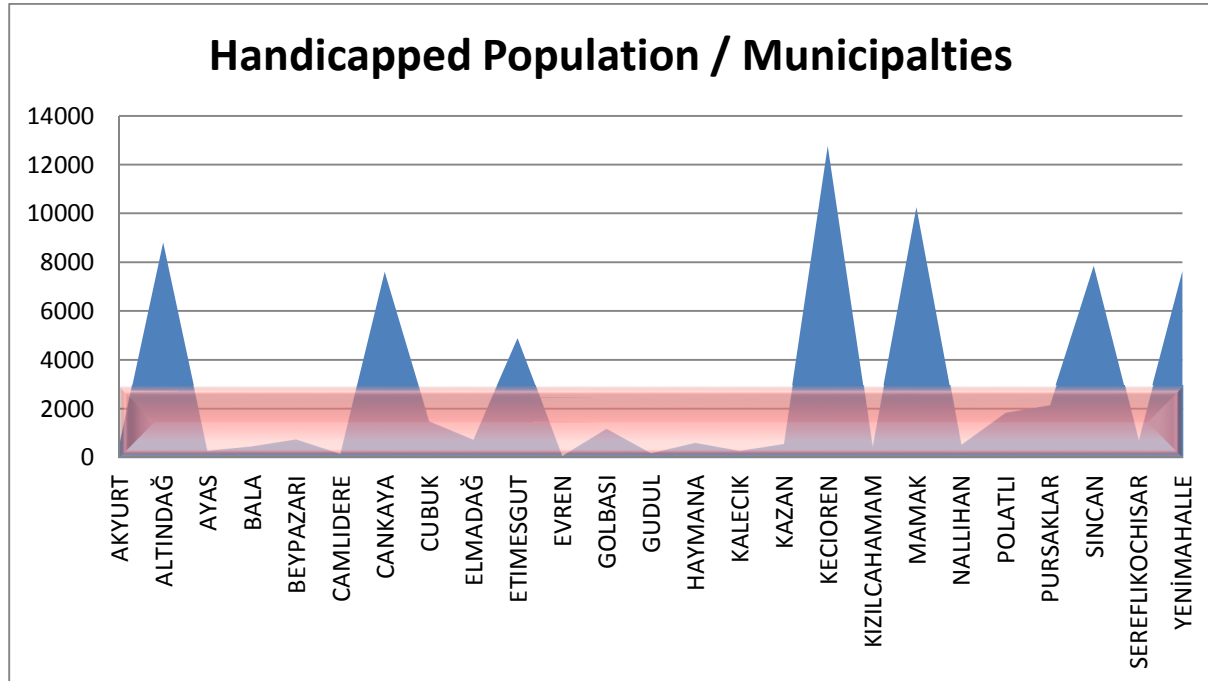


Figure 1. Handicapped population in municipalities of Ankara [1]

Among Municipality Service Buildings (M.S.B.) in Ankara, Mamak M.S.B, Altındağ M.S.B, Keçiören M.S.B, Yenimahalle M.S.B and Etimesgut M.S.B were selected as research area where the amount of handicapped individuals are well above average values. For the thesis study 19 forms were applied to these areas. For this article the forms investigating the accessibility from the public transportation vehicles to building entrances and the forms investigating the signage were used.

The answers obtained from these forms were evaluated as follows. For every question asked about an existing condition mentioned in TS 9111 (2011) and TS 12576 (2012), there were 4 types of answers. "YES" represents if the existing condition is up to requirements, "NO" represents if the existing condition is not up to requirements, "N/ANS" represents a situation where the question is not answered and that it does not cause a lack of accessibility, "N/APP" represents a situation where the question is not applicable to an existing situation and causes a lack of accessibility mostly related with the previous "NO" answer.

The positive answers were "YES" which add "0" (zero) points to the accessibility value (A.V) of the activity area as the existing condition is up to standards, "N/ANS" also gives "0" (zero) additional points to the

A.V. as the situation is not forming an obstacle. The negative answers were "NO" which give 100 points to the A.V. of the activity area as it represents a major lack of accessibility and "N/APP" which in this research is considered to add at least 30 negative points to the A.V. of the activity area where a regulation is either missing or not up to the standards. The higher the A.V. of an activity area the more accessibility problems there are. The obtained answers were calculated as quantities values using the formulation above and the results section was formed in order to explain the feedback observed from the activity areas observed.

The forms investigating the accessibility from the public transportation vehicles to building entrances of the 5 M.S.Bs were prepared from the TS 911 (2011) and TS 12576 (2012). The related articles were as follows.

Form 1 Accessible Route: TS 9111 (2011); Section 4.3 Accessible route / Section 4.4.2 Pedestrian Walkways / Section 4.4.3 ramps / Section 4.7.1.1.3 Railings / Section 4.11.1. Existing Buildings and Near Surroundings and TS 12576 (2012) Section 5.1 Pedestrian Pavements / Section 5.2 Ramps / Section 5.3 External stairs,

Form 2 Signage: TS 12576 Section 5.6. Signs and signage.

The research took place between October 2012 and November 2012. All the answers to questions asked in all evaluation forms were results of this time period when the study took place.

This work does not intend to criticize any municipality or any individual for not conforming to standards but aims to provide valuable information for removal of deficiencies so that the public spaces are more accessible by every person. Not only handicapped people but also people with other mobility restraints

should be able to move freely without help from others in all public service areas and get in social interaction with the society.

3. RESULTS AND EVALUATION

The evaluation of the data according to Form 1 Accessible Route gives the following results. The form consisted of 156 answered in different routes around 5 M.S.B.'s in Ankara

Table 1. Form 1 Accessible Route: Accessibility values (A.V.)

	YES	N/ANS	NO	N/APP	A.V.
Mamak M.S.B.	23	52	50	31	5390 pts.
Altındağ M.S.B.	29	25	58	44	7120 pts.
Keçiören M.S.B.	60	62	27	7	2910 pts.
Yenimahalle M.S.B.	36	61	36	23	4290 pts.
Etimesgut M.S.B.	35	26	51	44	6420 pts.

The observed problems from the data according to Form 1 Accessible Route were;

- There are no pedestrian routes designed for handicapped within the facilities boundaries between buildings relieved of car traffic. (TS 9111, Section 4.4.2.1)
- There are no perceptible (visual or audial) informative signage for orientation (TS 9111, Section 4.4.2.2)
- The curb ramps are not designed as 8% sloped and with chamfered edges on 3 sides complete with perceptible markings as mentioned in standards (TS 9111 Section 4.4.3.1)
- No relaxation area designed for handicapped users in every 30 meters
- Border stone of the pedestrian pavements are not designed as different color and textured from the pavement. (TS 12576 Section 5.1.7.2)
- Border stone at the pedestrian crossing is not designed as different textured form the pavement (TS 12576 Section 5.1.7.2)
- There are no different colored and textured frames around trees leaved with pavements. (TS 12576 Section 5.1.7.1)
- The rises of external stairs are not even and very high. The railings of the stairs are not designed as extending 30cm form the beginning and the end of each staircase parallel to ground. There are no water canals on sides of stairs. There are no perceptible markings on the start and end of stairs. There is no non-slip band at the nose of each stair and the edges are protruding. The staircases are not protected from weather conditions.(TS 12576, Section 5.3)

Common problems observed from each M.S.B.'s near surroundings are as follows;

- There is not at least one accessible route form public transportation stops, public car-parks, passenger loading zones or surrounding pedestrian pavement network to the building entrances. (TS 9111 Section 4.3.1)
- The protective obstacles from parking cars on pavements are not located on the border stone sides of the pavements (TS 12576 Section 5.1.6)
- There is not enough net width of 150 cm on walking zone or the security zones left on street side (50 cm) of the pavement or the property side (25cm) of the pavement (TS 12576 Section 5.1.1)
- The Pavements are not made of perceptible materials or routes (TS 12576 Section 5.1.5.1)
- There are no drainage lines and water gutters to evacuate the surface water on pavements (TS 12576 Section 5.1.7.3)
- There are no audio-visual notifications if there are any maintenance areas and are not surrounded by at least 10Cm high obstacles (TS 12576 Section 5.1.6)
- There are neither braille signage or proper lighting around external stairs nor side or middle railing where necessary (TS 12576, Section 5.3) (TS 9111, Section 4.7.1.3.3)
- There are no ramps or curb maps where there is more that 13mm height differences throughout the pavements where necessary (TS 9111 Section 4.3.6) (TS 12576 Section 5.2)

Mamak M.S.B.

Figure 2 Even pavement-road levels causes obstructions on route / un-protected external stairs form weather conditions, lack of side railings and non-slip markings on edges of stairs / External ramp well designed but not protected from weather conditions and not signed with perceptible markings around Mamak M.S.B. (Photograph: Ayşe Şeyma Arslantaş 2012)

Some other deficiencies regarding accessible route and signage are as follows;

- External stair surfaces are made of slippery materials and are not protected from weather conditions (TS 12576 Section 5.3.2)
- The height of the stairs reach higher than 180cm but there are neither half-way landings after 8-10 stairs nor there are side or mid railings where necessary (TS 12576, Section 5.3.1)
- The width of the accessible route is not 120-150cm consistently (TS 12576 Section 5.1.1)
- The screws binding electrical post are not hidden appropriately to prevent tripping (TS 12576 Section 5.1.7.1)
- The protective obstacles from parking cars on pavements are not located so that the pavements are occupied with cars. (TS 12576 Section 5.1.6)

Altındağ M.S.B.



Figure 3 Non-even pedestrian walkways, deficient dimensions for accesible route, non signing with perceptible markings around / Non signed accesible car park, there are no curb ramp and non even pedestrians walkway Pavement road levels, non uniform external stairs / unprotected external stairs from weather conditions and lack of railings and non-slip markings around Altındağ M.S.B. (Photograph: Ayşe Şeyma Arslantaş 2012)

Some other deficecies regarding accessible route and signage are as follows;

- The ramps along the pedestrian walkways are not as wide as 900cm and are not between 6% to 8% slopes (TS 9111 Section 4.3.7)

- The width of the accessible route is not 120-150cm consistently (TS 12576 Section 5.1.1)
- In sloped pedestrian walkways even though the slope is higher than required there is no appropriate ramp according to the standards (TS 9111, Section 4.4.2.2)
- The cross slope of the pavement is higher than 5% (TS 12576 Section 5.1.3)
- In ramps higher than 15cm there are no railings, side protection or perceptible markings (TS 9111 Section 4.3.3.2)
- Even though there are level differences on pavements there are no protective railings (TS 12576 Section 5.1.6)
- Slippery materials are used in routes in an around building site (TS 9111 Section 4.3.5)

Keçiören M.S.B.



Figure 4 Enough dimensions for pedestrian walkways but obtrusive surfaces on lamppost / Low-slope ramp and perceptible (but not in contrasting colored) markings along the route / lack of informative signage / Non-conforming railings and protruding edges on each stairs around Keçiören M.S.B. (Photograph: Ayşe Şeyma Arslantaş 2012)

Some other deficiencies regarding accessible route and signage are as follows;

- There are protruding grains and pavement materials on pedestrian roads (TS 12576 Section 5.1.5)
- Perceptible markings are not made of different color (TS 12576 Section 5.1.5.1)

- Railings are not continued parallel to the ground at least 30cm long at the end and beginning of the ramps and (TS 9111, Section 4.4.3.4)
- Accessible route is not properly signed from the regular route (TS 9111, Section 4.4.2.2)

Yenimahalle M.S.B.



Figure 5 Lack of side railings and informative signage around / Low-slope ramp with no-perceptible markings along the route Yenimahalle M.S.B. (Photograph: Ayşe Şeyma Arslantaş 2012)

Some other deficiencies regarding accessible route and signage are as follows;

- The width of the accessible route is not 120-150cm consistently (TS 12576 Section 5.1.1)
- In ramps higher than 15cm there are no railings, side protection or perceptible markings (TS 9111 Section 4.3.3.2)
- The screws binding electrical post are not hidden appropriately to prevent tripping (TS 12576 Section 5.1.7.1)

Etimesgut M.S.B.



Figure 6 non-even pedestrian walkways along the route/ lack of side railings and informative signage / un-protected external stairs from weather conditions around Etimesgut M.S.B. (Photograph: Ayşe Şeyma Arslantaş 2012)

Some other deficiencies regarding accessible route and signage are as follows;

- The cross slope of the pavement is higher than 5% (TS 12576 Section 5.1.3)
- There are no ramps or curb maps where there is more than 13mm height differences throughout the pavements where necessary (TS 9111 Section 4.3.6) (TS 12576 Section 5.2)
- In sloped pedestrian walkways even though the slope is higher than required there is no appropriate ramp according to the standards (TS 9111, Section 4.4.2.2)
- The ramps along the pedestrian walkways are not as wide as 900cm and are not between 6% to 8% slopes (TS 9111 Section 4.3.7)
- Curb ramps 8higher than 5% slope) are not designed as hard non-slip materials and contrasting colored with low barbed materials (TS 12576 Section 5.2.3)
- There are no railings on sides of stairs. (TS 12576, Section 5.3)
- External stair steps have protruding edges (TS 12576 Section 5.3.3)

- In ramps higher than 15cm there are no railings, side protection or perceptible markings (TS 9111 Section 4.3.3.2)

The amount of “YES” answers retrieved from Form 1 Accessible route in and around the Keçiören M.S.B., show that the existing applications in built environment have positive effects to the accessibility of the public areas. The compliance to the standards of the near surroundings of these buildings is related directly with the topographical status of the building site. Altındağ M.S.B., which is situated on a high sloped site, gave more negative answers to the questions due to this topographical disadvantage and also the lack of some requirements asked in forms so that it produced more accessibility value than other public buildings. Second and third in A.V. are Etimesgut M.S.B., Altındağ M.S.B. which are un-accessible because of the un-conforming widths of pavements around them from the public transportation stops and car parks.

The evaluation of the data according to Form 2 Signage gives the following results. The form consisted of 27 questions answered in different building surroundings around 5 M.S.B.’s in Ankara

Table 2. Form 2 Signage; Accessibility Values (A.V.)

	YES	N/ANS	NO	N/APP	A.V.
Mamak M.S.B.	23	52	50	31	1160
Altındağ M.S.B	29	25	58	44	1160
Keçiören M.S.B	60	62	27	7	1060
Yenimahalle M.S.B	36	61	36	23	1060
Etimesgut M.S.B	35	26	51	44	1060

The observed common problems from the data according to Form 2 Signage were;

When observed regarding deficiencies in signage all public buildings gave negative answers to the questions. Even though Mamak M.S.B. and Altındağ M.S.B. provided handicapped parking spaces, they were not compliant to the standards graphically and with regard to their locations. Blue/White for information, Green/White for orientation, Yellow/Black for danger and red/White for stop, ban, and emergency situations are the colors to be used in signage was not present in existing situations. The markings in maintenance areas were not conforming to the standards as they were not situated to allow handicapped passage. Existing markings also do not have braille markings, contrasting colors, non-luminous materials and lighting. The heights and character types of the markings do not conform to standards. And also there was no consistency between different activity areas with regard to markings and signage.

The research took place between October 2012-and November 2012. Some perceptible signings were completed but some of them were not completed within the scope of the study.

4. CONCLUSION

Although there are many applicable and practical solutions, means of equipment in the market and although 8 years had passed from the year when the accessibility action plan started in 2005 in Turkey, there are still many problems observed in and around municipality services buildings (M.S.B.) in Ankara.

The evaluations of these building with regard to Turkish Standards TS 9111 (2011) and TS12576 (2012) lead to following conclusions;

Accessible route form of the Keçiören M.S.B. which provided 2910 points was the lowest score achieved from this evaluation criteria. In contrast to this the same form of the Altındağ M.S.B. provided 7120 Point which was the highest score regarding the external accessibility of these facilities. The General Accessibility Value (G.A.V) of these buildings that was evaluated in the M.S. Thesis “The investigation of Municipal buildings and their environments with regard to Turkish Standards related with Accessibility” (Gazi University Graduate School of Natural and Applied Sciences, Program of Architecture, M.S. Thesis,

August 2013) [1] by Arslantaş also showed that the highest G.A.V. value was observed in Altındağ M.S.B and the lowest G.A.V. was observed in Keçiören M.S.B. This direct correlation proves that the accessible route form and the negativities observed in external accessibility directly effects the G.A.V of the M.S.B.'s evaluated in this study.

The problems for handicapped people still exist in and around municipality services buildings that limit the access to these areas without the help of others due to obstacles of the physical environment. As many other public buildings these buildings are still not up to the regulations and standards. Especially the routes that have to be accessible form public transportation to these buildings firstly not compliant to the standards in means of measurements, materials slope and security but also are mostly occupied by cars and other obstacles.

Also the deficiencies in signage with regard to the Turkish standards could easily be refined through minor efforts and should be easily perceptible and simple and understandable by more than two senses and also be compliant to the related Turkish Standards if any of these public areas are to be accessible and usable by handicapped people without the help of others and sustain the design for all prince in built environment.

Accessibility should not be a set of regulations imposed up on existing buildings due to legal regulations but should be considered as a primary design principle in the design process by the architect and city planners. Only by this way the problems caused by the built environment on handicapped people could be solve without even existing. This will not be only for the handicapped but also for all people in lack of mobility due to many different reasons.

As a conclusion the compliance to the standards of the near surroundings of these buildings are not only related with the built physical environments and the architectural obstacle but also is related directly with the topographical status of the building site and the neighborhood and setting these buildings are located and also people's information on such regulations.

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