

PRELIMINARY COMMUNICATIONS

# Problem of Organized Transport for Employees with Physical Disabilities in the Republic of Serbia

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Received: October 18, 2019 Accepted: January 14, 2020 **Abstract:** Protection of the rights of persons with disabilities is one of the most delicate elements of socio-development, economic and above all social policy, which aims to remove negative consequences, both on the quality of life and work of these people, and members of their families. One of the key problems facing persons with disabilities in the Republic of Serbia is a (non)organized transportation. Therefore, it becomes more difficult to ignore members of this population while using the public transport capacities and the problems they face at the opportunity. The main goal of this paper is to point to the legal barriers that are present in the national legislation of the Republic of Serbia, which affects the long-lasting maintenance of this population's high unemployment rate. The results of the research indicate a very small number of vehicles that are given to the use of people with disabilities in the Republic of Serbia, of which 1/3 owns the mechanical ramp, and 2/3 hydraulic ramp. Finally, the paper zoned the map of the Republic of Serbia, in order to indicate through the graphical representation of the (non)existence of transportation in certain parts of our country to persons who are immobile in the lower extremities.

Keywords: (non)organized transport, zoning map of RS, unemployment rate.

### INTRODUCTION

Disability is a complex social phenomenon that practically strands in all areas of modern life and requires multisector access and cooperation of various authorities, local self-governments, civil sector and persons with disabilities and their Organization [2]. The existence of disability has always withdrawn and elevated the risk that persons with disabilities (PWDs) and their family members to face some form of social isolation. The described situation leaves many of negative consequences on family members who provide long-term care for people with disabilities, especially if it prevents them from working, which increases the risk of coping with burn-out syndrome or material deprivation [3]. Convention number 159/83 Vocational Rehabilitation and *Employment (Disabled Persons)* restates the idea that persons with disabilities should be fully integrated into the world of labor and society, without loss of fignity [1].

The estimated number of PWDs in the Republic of Serbia is about 700,000, of which between 215,000 and 300,000 is a category of potentially working engagement population aged 15 to 65 years [4]. Research made on the topic of determining the cause of the high unemployment rate PWDs in the Republic of Serbia, shows that people with phisical disabilities as the largest employment barrier see the problem of accessibility for the facilities [3]. Inefficiency in access to facilities, both because of architectural deficiencies, and due to the lack of specialized transport for the PWDs, has led to a failure to fulfil the basic requirements for members of this population and to prevent many immovable persons from move. According to Henry, T. (2009), inaccessibility to the built phisical environment is one of the significant barriers to the full participation of persons with phisical disabilities in the society [5]. Therefore, the intention of the study was conducted in this paper to point to the current situation and the representation of the organized transportation to person with phisical disabilities in the Republic of Serbia.

Also, the goal of the research is to show the impact of the momente law of the legislation on the accessibility of persons with bodily disabilities to and from jobs. The following tasks are set with this:

- Identifying entities that possess specialized vehicle for transportation of PWDs;
- Identifying the entities that possess these vehicles for the purposes of transport of the PWDs to and from work;
- Determining the purpose of these vehicles, i.e. priorities in use;
- Determine how access to these vehicles in accessed by an PWDs.

## **LEGISLATION IN SERBIA**

The position of persons with disabilities in the Republic of Serbia is regulated by a many of legal and sub-legal acts, and such provisions relating to the rights of persons with disabilities meet in all important laws adopted by the National Assembly. Almost every legal act in at least one of it's member talks about a persons disabilities right. In addition to the positive regulations adopted by the National Assembly, the position of persons with disabilities is regulated by the international conventions ratified by the Republic of Serbia, which became part of the internal law of internal positive regulations and as such can be immediately apply. The most important document of International public Law is the Convention on the Rights of Persons with disabilities, as the first instrument on human rights adopted by the UN in the new millennium. From regional and european documents, it's particularly significant to the revised European Social Charter, which guarantees to persons with disabilities the right to independence, social integration and community involvement [2].

Although the position of persons with disabilities in the Republic of Serbia is through in many of normative acts, of which the most important Law on professional rehabilitation and employment of persons with disabilities, the research shows that the number of employed persons who have disability, including and persons with phisical disabilities, has not increased significantly after ten years since the application of the aforementioned law. There are a number of causes that highlight this problem, and an increase in the unemployment rate of PWDs. Some of the most important problems facing the PWDs are architectural barriers and the organized transport. Architectural barriers in the Republic of Serbia were recognized two decades ago, when it was created and legal grounds for its resolution, which resulted in the adoption of the Law on Planning and Construction, 2009. year. This Act defines that all objects must be designed, constructed and maintained so that all users, especially persons with phisical disabilities, provide a access, movement, stay, or use of the [6]. Also, the organised transportation has not yet found its place in the Republic of Serbia legislation, but it has been left as a free choice and goodwill by units of local governments, city administrations, municipalities, associations, etc. The lack of organised transport for persons with phisical disabilities, which would function by the "door to door" principle, combined with architectural barriers (inadequate access to the building, lack of platforms, elevators, etc.), makes it much harder access to a number of organizations in which potentially these people could base a working relationship, inevitably affecting their unemployment.

According to United Nations (2007), accessibility is about giving equal access to everyone and without being able to access the facilities and services, person with phisical disabilities will never be fully included into social flows [7]. In this regard, these people must first be allowed access to the facilities, which would achieve a lower unemployment rate for members of this population. Numerous regulations concerning the position of the PWDs cannot be fully applied precisely due to the aforementioned barriers.

#### LITERATURE REVIEW

There are many definitions that determine the meaning of "*people with disabilities*" in the same ways. One of the more approximate definitions that corresponds to the work subject is provided by Oregon Department of Transportation which defines people with disability as "individuals of all ages who are unable to transport themselves without special equipment or outside assistance due to a phisical impairment" [8].

Griffin, K. W. (2004) further added that the simplest way of increasing the use of public transportation facilities is to establish an environment where pedestrian access is safe, convenient, and comfortable [9]. Habert and Blank (1992) reported that there is increasing awareness, particularly in the developed and industrialized countries, pertaining to the disabled, but that the present provisions are inadequate and not disabled friendly. [10]. Kennedy, M. K. and B. Hesla (2008) too, supported attitude that people with disabilities have not been treated as equals like other citizens. They pointed that, the disabled is a unique category of people, and have a limitation in accessibility in use of built environment needs further attention in a society as compared to a normal people. [11].

Zajac A. (2016) also considered that in the recent years more attention has been paid to accessibility of public transport and space. This growing interest is also visible in The European Union transport policy, aiming at securing rights of passengers with reduced mobility [12]. The European Conference of Ministers of Transport announced in 2006. *"Guide to good practice – Improving Transport Accessibility for All"*, which insists that the national and local government should have a responsibility for the development of affordable transport and infrastructure. In this regard, national government is responsible for national laws and regulations defining access in the environment [13].

In the study, which was conducted 2017. in regard with to the position of the person with disabilities in Republic of Serbia, the recognized obstacles to employment of PWDs are presented (Figure 1) [4].

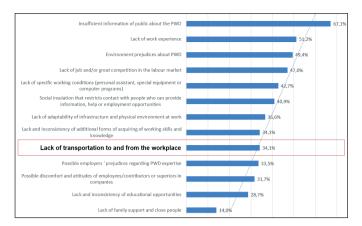
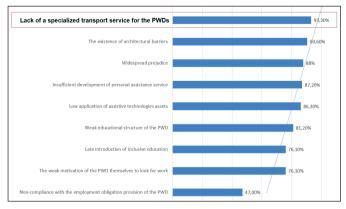


Figure 1. Total recognized obstacles to employment of PWDs (N=164)

This results suggest that one third of the PWDs recognizes as a lack of unaccessibility of the workplace, where is among other things and the lack of transportation to and from the workplace (34.1%). This data have the weight of meaning if in considering that the research is covered by persons with different disability forms (persons disrupated in intellectual development, blind and visually impaired persons, hearing impaired persons, etd.), and not just persons with phisical disabilities.

Figure 2 present the latest research of Dimitrijevic (2016), performed in the Republic of Serbia, on the topic of social integration of the PWDs and the problem of hiring members of this population, which also indicates problems of accessibility and lack of service specialized transport. This research included 117 people with some kind of disabilities of upper and/or lower extremities, where 39 people use a wheelchair (manual or electric motor) [3].



**Figure 2.** Respondents ' opinions on the most significant obstacles regarding hiring persons with phisical disabilities (N=117)

Based on the entire state of the described situation, it is inevitable that the person with phisical disabilities, especially those who use the wheelchair, enables adequate access to work. In this regard, Korsu i Wenglenski (2010) belive that low access to jobs is related to increased risks of unemployment, especially in low-income areas. [14].

#### METHODOLOGY

The research was conducted through the collection of data on the existence of specialized vehicles for persons with phisical disabilities in the Republic of Serbia and refers to the transport that works by the principle "door to door". The main objective was to determine the existence of this type of transportation that is free for users and do not constitute an additional cost to PWDs, while commercially transport of PWDs was not part of the research.

The main data sources, used in this study, were collected from the City Administration, Municipalities and various Associations that bring together persons with disabilities throughout the Republic of Serbia. Data processing and analysis were done using a online software "ColorMaps", which made zoning map of the Republic of Serbia on the existence of specialized transportation for persons with phisical disabilities.

#### **RESULTS AND DISCUSSION**

The development of a specialized transport service for persons with phisical disabilities based on the universal principles of the design is an important task, primarily for the members of this population, but also for that State, especially with regard to the employment. According to research by Dimitrijevic's (2016), persons with phisical disabilities have no motive to look for job, because of the architectural barriers, and because of the lack of transportation that would work ,,to and from the workplace''. For these reasons, the largest number of unemployed members of this population is relying on information they receive from the representatives of the National Employment Service, through relatives, friends or acquaintances. [3].

Analysis of data on possession and provision serices of specialized transport for persons with phisical disabilities, collected from different state administrations and associations, it depicted in table 1 below.

**Table. 1.** Total number of specialized transportation for PWD's inRepublic of Serbia and way of access to vehicles

Subjects	Total number of vehicles	Percentage	Mechanical Ramp	Hydraulic Ramp
City administration	9	21,95%	0	9
Municipalities	5	12,20%	2	3
PWD's Associations	8	19,51%	3	5
Organization	19	46,34%	9	10
TOTAL	41	100%	14	27

The described results shown in the table indicates a very small number of vehicles on the territory of the Republic of Serbia, which are intended for free transport to person with disabilities. These are emphasized the insurmountable barriers to members of this population, which is why it is difficult to expect that the unemployment rate of persons with phisical disabilities can be reduced without minimum initial conditions for their daily functioning. The positive side of the data shown in the table is the fact that 2/3 vehicles possess a hydraulic ramp, intended for entering and exiting persons with phisical disabilities, which reduces the phisical effort of these persons, but also their assistants.

In addition, the research also enables determining the various priorities of using these vehicles, which differ from the subject to the subject that provides the transport service to the PWDs. Some of the recognized priorities fefer to the:

- Transport PWDs to hospital, treatment, rehabilitation;
- Transport PWDs to school and back;
- Transport PWDs to various competitions, excursions, manifestations, etc.;
- Transport PWDs to various educations etc.;
- Transportation for children, youth and adults of impeded development;
- Transport PWDs to work and back.

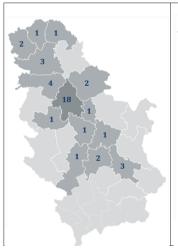




Figure 3. Zoned map of RS and identified number of vehicles per districts for transport PWDs without priority

**Figure 4.** Zoned map of RS and identified number of vehicles per districts for transport PWDs to and from the workplace

From the described can be seen that great attention is given to transportation, primarily a persons with phisical disabilities to examinations, rehabilitation, different manifestations and various excursions. The research showed that there is almost no subject on the territory of the Republic of Serbia, which for the use of its specialized vehicle as priority sets the transport of PWDs to and from the workplace. This fact clearly points to the necessary assistance of the State, in order to provide equal labour rights for PWDs, as to citizens without phisical disability.

Also, this study zoned the map of the Republic of Serbia, according to two separate criteria. On the first map, figure 3, it was done zoning of all identified specialized vehicles, intended for free transportation of the PWDs, regradless of the priorities set. On the other map, figure 4, it was done the zoning of the map of all identified specialized vehicles, intended for free transportation of the PWDs where, among other things, the possibility of transportation to and from the workplace is a priority.

This study indicates a problem of availability of job opportunities for users of the wheelchair in the Republic of Serbia, indicating the need for interventions to increase and facilitate access to persons with phisical disabilities to objects of organizations, using specialized transport. Richard K., Scotch i Charles E. McConnel (2017) indicate that accelerated technological changes, including automation and increasingly sophisticated infrastructure that used by computers and telecommunications, are very changing the nature of the work that requires less phisical effort, but higher levels of education and improvements flexibility in task performance [15]. So, persons with phisical disabilities are in the category of people who are worth investing in and who, with proper and necessary education and training, they can provide answers to all requirements that modern society and technology dictate.

# CONCLUSION

The problem of Accesibility to objects for PWDs should be treated as a multidimensional phenomenon. In basic terms, accessibility can be ensured by appropriate specialized vehicles, with universal ergonomic design, customized for users with phisical disabilities. By introducing these vehicles, the state would show the care of belonging to PWDs society, which would achieve one of the most basic international human rights, in accordance with the *Universal Declaration of Human Rights*, which is that all persons are treate equally with equal conditions of work. From another aspect, the development of transportation service for PWDs to and from the workplace, with appropriate legal support, it would inevitably affect of reducing the unemployment rate of members of this population, which is of interest to each country.

The research shown in the paper was aimed at providing to facts at one of the problems that persons with phisical disabilities face off in the Republic of Serbia. The study identified the gap between efforts of the state to ensure a lower unemployment rate of PWDs and real problems of this PWDs face when looking for job.

The main contribution of this research is to encourage a better relationship between members of the general population according to persons with phisical disabilities, as their equalization from an aspect of achieving the right to work and working conditions.

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