RAILWAY REPORTS

Methodology for the Development of a Disability Strategy at Passenger Stations

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Summary

In the last decade, considerable funds have been dedicated to the modernization of passenger stations in order to adapt them to the needs of all travelers. Thanks to the adoption of universal design principles, as well as technical specifications for interoperability connected with the accessibility of rail transport for the disabled, many facilities are now equipped with fully-accessible infrastructural elements used by travelers. Despite this, stations do not adopt any access strategies along with traffic rules, which is required by the applicable EU law and domestic regulations. The article refers to a method of collecting data required for the elaboration of such documentation for every passenger station, which has been developed by the Railway Research Institute. It also evokes a bill on the provision of accessibility to persons with special needs, adopted by the Council of Ministers in June 2019. Previous efforts of railways aimed at improving the availability of this branch of transport correspond to the requirements arising from this act.

Keywords: rail transport, the disabled, accessibility, obstacle-free route

1. Introduction

Rail transport infrastructure intended for train passengers should provide for the needs of all persons with regard to accessibility and security in achieving spatial goals. With reference to passenger stations, this ensures full exploitation during their construction, expansion, modernization or revival of universal design principles (*Universal Design*) [5].

The issue of providing accessibility to all travelers is concerned with the adjustment of rail infrastructure to the needs of the disabled and persons with reduced mobility. In the process of designing rules to guarantee equal access to railway services, it is necessary to indicate and adopt an unambiguous definition of a disabled person as well as a person with reduced mobility³.

Disabled person

The definition of a disabled person is included in the act on vocational and social rehabilitation as well as employment of the disabled (Journal of Laws of 2011, no. 127, item 721, as amended). This act defines three disability levels: severe, moderate and mild, which are declared by commissions for persons aged 16 upwards. In turn, persons below the age of 16 receive a certificate of disability. It must be stressed that disabled persons, pursuant to the aforementioned act dated 27 August 1997, are persons holding a valid certificate which categorizes them into one of three groups of disabled persons, issued before 1 January 1998.

The most important international document specifying the list of rights exercised by the disabled is the UN Convention on the rights of persons with disabilities (UNCRPD⁴), adopted along with the so-called Optional Protocol by the General Assembly of the United Nations on 13 December 2006. Poland is party to the convention. Regarding domestic law, it is essential that we evoke the Act of the Sejm of the Republic of Poland dated 1 August 1997 containing the Charter of Rights of Disabled Persons (M.P. dated 13 August 1997, no. 50, item 475).

Person with reduced mobility is a term specified in the Decision of the European Commission 2008/164/CE [1]. It defines travelers considered as

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³ Many relevant publications include the term "Persons with physical disability".

⁴ UN Convention on the Rights of Persons with Disabilities.

persons with reduced mobility. The group is composed of the following:

- persons in wheelchairs or persons with reduced mobility (with impaired walking due to injuries or limb fractures),
- persons traveling with small children,
- persons with heavy or cumbersome luggage,
- the elderly,
- pregnant women,
- blind or visually impaired persons,
- the deaf and persons with hearing impairment,
- persons having difficulties in communicating with others (difficulties in communicating or understanding written or spoken language – including foreigners who do not know a local language),
- mentally or intellectually disabled persons,
- short persons (incl. children).

This group includes persons with permanently and temporarily reduced mobility. It is necessary to emphasize that a person with reduced mobility is also a carer with a small child and/or with a child in a baby carriage. These persons must be granted assistance by the carrier or head of the railway station with regard to their travel, as well as space in the train compartment in which the carer may easily travel with a child in an unfolded baby carriage so that other passengers are not disturbed. This right is not respected by all carriers. Proper assistance and understanding on the part of the carrier or head of the railway station should also be provided to persons with temporarily reduced mobility (e.g. broken limbs) as well as the elderly.

Many countries assign obese persons into the group of disabled persons with reduced mobility. This issue is not considered in the aforesaid specification for interoperability. With reference to this matter, carriers in various branches of transport, including rail, have increasing difficulty preparing space for such travelers.

In the amended applicable resolution of TSI-PRM (1300/2014) [9] in point 2.2 – the definition of a disabled person and person with reduced mobility is as follows: "A disabled person and person with reduced mobility is any person who deals with permanent or temporary physical, mental, intellectual or sensory impairment which may hinder the full and effective use of means of transport to the extent other passengers do so, or whose mobility via means of transport is limited due to age".

Persons in wheelchairs

Wheelchairs are most often used by persons who cannot walk on their own due to disease or accident.

These are, for example, persons who have sustained a spine injury or deal with MS⁵, who can be totally or partially paralyzed (with paresis of hands and legs). This group includes persons who cannot walk on their own and those who are able to take a few steps on their own or with the assistance of others.

The persons from this group use various types and kinds of wheelchair. These include manual wheelchairs (often very light and maneuverable) and electric wheelchairs – typically heavier and larger (an electric wheelchair can weigh even up to 100 kg). The users of such wheelchairs know perfectly well how to use them and the kind of assistance they need.

The deaf and persons with hearing impairment

Deaf persons receive information primarily through eyesight. They communicate on the basis of sign language. They often have difficulties in communicating with persons without hearing impairment, which is the basic problem in communication. Some deaf persons can understand words by lip-reading.

The persons with impaired hearing can not hear sufficiently and use speech. Their speech is frequently unclear, for example, they may not pronounce all sounds (e.g. sz, ć, ch, k). The speech of persons with impaired hearing is disturbed but other persons can usually understand it and enter the conversation. The reception of the verbal information is improved if a hearing aid is used. The deaf (young and old people) and persons with impaired hearing (young people) sometimes find it difficult to do grammar and comprehend written texts.

Blind and visually impaired persons

Blind persons cannot see anything or have a sense of light. These persons explore the world through other senses, such as hearing, touch, smell, taste and movement. What they find most difficult in their everyday life is moving and reaching destinations on their own. They most often support their walk with a white walking stick or a guide dog. The blind often ask guides who can see for help. These persons use Braille to read written texts or use audio-books.

Visually impaired persons can see but their eyesight varies. This group includes persons with the following:

- lower sharpness of vision, narrow visual field (the so-called tunnel vision),
- scotoma in the central field of vision (a black or gray spot in the center of vision),

- scattered scotoma (vision varies, and scotoma may move and change shapes),
- difficulties in distinguishing colors (color-blind persons).

Depending on the level of vision, these persons face various challenges in their everyday life, such as reading and writing issues, moving capability difficulties, as well as the inability to recognize faces and details. For this reason, visually impaired persons who use a white walking stick are able to read a large font, for instance [4].

Considering the needs of the above-stated groups of travelers, the applicable law states that every passenger rail infrastructure facility should have a traveler access strategy which adopts traffic rules. The purpose of this article is to provide an insight into the access of travelers to passenger stations as well as the scope of information to be included in the strategy. In addition, an instrument facilitating the preparation of this document will be discussed. The method used is based on the use of a detailed survey of the passenger infrastructure facility. It involves a set of parameters which strictly identify the infrastructure facility and its equipment, and has an impact on the accessibility level and safe movement of the disabled and persons with reduced mobility within the station.

2. Major legal acts regulating accessibility

The railway system requires interoperability, that is, the technical compliance of particular subsystems, in order to achieve consistency in the EU transportation network. The valid documents which apply to EU member states are resolutions, directives and decisions.

The first technical specifications for interoperability related to "Persons with reduced mobility" of the trans-European conventional railway system and trans-European fast railway system were defined in the Commission's Decision dated 21 December 2007 (2008/164/CE) [1]. At the beginning of 2015, the Resolution of the Commission (EU) no. 1300/2014 dated 18 November 2014 on technical specifications for interoperability referring to accessibility came into force [9]. The document superseded the Commission's Decision from 2017 and applies to the following subsystems: "Infrastructure", "Rail traffic", "Telematic applications" and "Rolling Stock". Another important document for travelers is Resolution (CE) no. 1371/2007 of the European Parliament and Council dated 23 October 2007 on passengers' rights and obligations in rail traffic [8].

Chapter V of the document [9] includes regulations concerning the disabled and persons with reduced mobility which regulate the right of these persons to be transported, information and accessibility, conditions and assistance at railway stations and on the train, as well as requirements concerning the equipment of persons with reduced mobility or other specialist equipment.

Attachment II of the document [9] informs about the minimum scope of information provided by railway enterprises or ticket sellers, including information on the accessibility, access conditions and adaptation of trains to the needs of the disabled and persons with reduced mobility.

In turn, Attachment III specifies the range of assistance given to the disabled and persons with reduced mobility (minimum standards for traveler service quality). Considering domestic legal acts, the issue regarding the need to develop an access-to-passengerstations strategy was stipulated in the resolution [10]. The Council of Ministers adopted the bill on the provision of accessibility to persons with special needs [7]. It is advisable to quote the most important passages of this document.

According to the act, a person with special needs must be understood as "any person who due to outward or inward features or circumstances must undertake additional actions or use additional means in order to overcome obstacles and, in effect, participate in various spheres of life just like others" [7]. "The purpose of the act is to boost accessibility thanks to which disabled persons will be able to use public space, means of transport, technologies and IT&ICT systems on their own and on equal terms" [3].

Pursuant to art. 6 of the document [7], the minimum requirements intended to provide accessibility to persons with special needs include the following in terms of architectural accessibility:

- provision of obstacle-free public space (horizontal and vertical) in buildings,
- installation of devices or use of technical means and architectural solutions in the building which allow access to all rooms, excluding technical rooms,
- provision of information on the location of rooms in the building, based at least on visual, touch or sound elements,
- provision of admission into the building to a person who uses a guide dog, as referred to in art. 2 point 11 of the act dated 27 August 1997 on vocational and social rehabilitation and employment of the disabled (Journal of Laws of 2018, item 511).

A regional development minister is responsible for coordination of formal and legal actions, referred to in the act, with a view to ensuring accessibility. The coordination is concerned with monitoring the provision of accessibility, initiating changes to legal regulations with respect to accessibility, setting directions and undertaking informative and promotional actions concerning accessibility.

Based on the act, the Accessibility Council is formed and its primary task is to give expert opinions to and advise the regional development minister. The duties of the Council are the following:

- assessing legal act bills and other accessibility-related documents,
- advising on the way of fulfilling tasks specified in the agendas aimed at supporting accessibility actions,
- formulating recommendations with regard to changes to accessibility regulations,
- assessing access criteria for entities which apply for accreditation,
- assessing the accessibility documents submitted to the Council,
- advising on the need to initiate actions with regard to accessibility by public administration bodies,
- giving opinions and taking stands, in particular with regard to the needs of the disabled and initiatives aimed at raising social awareness concerning accessibility, and the preparation of annual reports on the Council's operations.

The entities which perform tasks to the benefit of accessibility, in particular the entities referred to in art. 3 para. 2 and para. 3 points 3 and 4 of the act dated 24 April 2003 on public benefit activities and voluntary work, operating to support the disabled statutorily and satisfying specific access criteria, are allowed to apply for the accredited entity status with regard to accessibility certification. The accreditation is granted by the Head of the State Fund of Rehabilitation of Disabled People (PFRON) as a response to the entity's application for accreditation. The document that confirms accreditation is a certificate of accreditation. The entities which have been accredited by PFRON are entitled to certify architectural, digital and public transit accessibility. The accessibility certification is intended to verify whether a specific entity provides accessibility on the terms stipulated in the act.

It must be stressed that the document introduces the need to draw up reports on the provision of accessibility to persons with special needs in the specific entity and to publish it on the website of the Public Information Bulletin and regional development minister or local provincial governor. It also requires public facilities to obtain certificates of accessibility, issued by the certification bodies for the period of four years.

The act in question does not apply to the passenger rail infrastructure, which in terms of accessibility is subject to the technical specification for interoperability TSI PRM [9]. It is, however, an important systemic solution in Poland which specifies the means intended to ensure accessibility to the disabled. Its essential goal is to improve the accessibility of public space to disabled persons by allowing them to participate in social life on an equal basis with other persons. The fulfillment of this goal will be possible through the implementation of solutions presented in the act. The accessibility-related requirements, specified in the act, fill the legal gap referring to the passenger station surroundings with regard to the full adaptation of public spaces to all people.

3. Passenger stations available to all travelers

When considering a passenger station available to all travelers, we think of a facility whose elements of infrastructure have been designed in accordance with universal design principles. It also means compliance with applicable standards, norms and guidelines arising from good practices stipulated also by disabled travelers and persons with reduced mobility. Considering the elements which ensure full accessibility, it is necessary to list the following:

- car park with space for the disabled in front of the railway station,
- adaptation of doors and entrances (no thresholds and steps),
- use of non-slip flooring devoid of irregularities, visible obstacle signs,
- adjustment of toilets to the disabled, particularly those who use wheelchairs,
- adaptation of ticket offices to disabled persons in wheelchairs and proper equipment (induction loops – persons with impaired hearing, videotranslator – deaf mute persons, paper, smartphone, tablet – deaf persons),
- amenities when buying tickets,
- initial and last step of the stairs marked in color,
- use of railings by stairs and ramps,
- passageways equipped with lifts, escalators, ramps, platform lifts, etc.
- use of pictograms for easy movement,
- provision of information through a written system,
- use of synchronized dynamic passenger information systems (visual and sound),
- placement of site plans and typhlographic schemes within the station,
- use of touch elements for the blind and visually impaired persons (paths, attention fields, warning lines),
- use of suitable lighting along with solutions which prevent dazzling,
- adaptation of small architecture to all groups of travelers,
- use of obstacle-free passages for smooth movement so that a disabled person can easily move around the railway station and platform and get on the train.

Importantly, upon the special request of a disabled traveler, he or she should obtain assistance from a railway employee (assistance service available less than 48 hours beforehand). Therefore, the personnel responsible for supporting travelers should undergo regular training, which leads to higher levels of competency on the one hand, and is appreciated by the disabled on the other.

4. Requirements concerning the need to develop passenger station infrastructure access strategies arising from the applicable law

The need to develop strategies of access for each passenger station was demonstrated for the first time in the Commission's Decision [1] as early as in 2007. The document required the administrator of the infrastructure or head of the station to prepare traffic rules (point 4.1.4) specifying passenger station accessibility for disabled persons. It stated that "Administrator of the infrastructure or head of the station should adopt a written strategy aimed at providing all persons with reduced mobility with access to the passenger infrastructure at all times when the station serves passengers and in accordance with technical requirements of this TSI. Additionally, this strategy should comply with the procedures of each railway enterprise which wishes to use such facilities and devices. This strategy will be adopted through the provision of suitable information to the personnel, procedures and training".

The requirement of having a written passenger station strategy specifying the accessibility of infrastructure for the disabled and persons with reduced mobility was restated in the amended document, i.a. Resolution of the Commission (EU) no. 1300/2014, point 4.4.1 [9]. Pursuant to the applicable document, the scope of the strategy must include traffic rules for the following situations:

- access to the station "Traffic rules must ensure access to information on the availability of all stations" [9];
- stations without personnel issuing tickets to blind passengers "It is necessary to develop and implement traffic rules concerning stations without personnel, where tickets are printed by ticket machines. (...) This being the case, it is always necessary to prepare alternative ways of issuing tickets available to visually impaired passengers, e.g. the possibility to purchase tickets on the train or at the destination" [9];
- ticket inspection with the use of turnstiles;
- platform illumination "It is allowed to switch platform lighting off when no train is expected to come." [9];

- visual and spoken information, including passenger information, upon request ("It is necessary to adopt traffic rules which will guarantee the provision of basic visual and spoken information". (...).
 "When spoken information is not given through the station's public address system (...), it is necessary to implement traffic rules assuring the operation of an alternative information system by means of which passengers can obtain the same information in a spoken form at the station, e.g. phone information service operated by personnel or an automatic variant.") [9],
- platforms zones equipped with devices intended to support persons on wheelchairs while getting on the train "Rail enterprise and administrator of the infrastructure or head of the station must jointly specify the zone or zones on the platform's premises where the aforesaid devices are likely to be used, considering various configurations of the number of carriages. It is necessary to adopt traffic rules in order to specify, as far as possible, the point at which the train stops, depending on the location of such a zone or such zones." [9];
- safety of manual and electric-driven devices which serve to support persons in wheelchairs while getting on the train: "It is necessary to implement traffic rules concerning the operation of supporting devices by the station's personnel. It is necessary to adopt traffic rules concerning the use of a moving protective rail on platforms for wheelchairs by the personnel. It is necessary to implement traffic rules which allow the personnel to operate the wheelchair ramps safely, including their assembly, protection, lifting, dropping and storing". [9];
- railway personnel's assistance in getting on/off the train: "It is necessary to adopt traffic rules aimed at informing the personnel that disabled persons and persons with reduced mobility may require assistance when getting on and off the train, as well as ensuring such assistance, if necessary. The terms on which assistance is given to the disabled and persons with reduced mobility have been specified in the resolution (CE) no. 1371/2007" [8];
- use of guarded level crossings (If guarded level crossings are allowed, it is necessary to adopt traffic rules which guarantee suitable assistance of the personnel given to the disabled and persons with reduced mobility at the guarded level crossing, along with information concerning when the tracks can be crossed safely") [9].

Once the document has been drawn up, it must be adopted by providing suitable information to the personnel responsible for serving travelers at the specific facility, elaborating the procedure of actions and training. According to the rules of law, the strategy of a specific passenger station must correspond to the procedure of each railway enterprise which wishes to use its facilities and devices. For this reason, the entities obligated to elaborate the strategy – administrator of the infrastructure and passenger station operators – should initiate cooperation with the rail carriers or public transport operators whose trains are scheduled to stop at the passenger infrastructure facility in question. We must highlight that the above-stated written strategy must be developed separately for each passenger station.

Polish legal acts repeatedly presented a requirement to satisfy the obligation arising from both the Commission's Decision from 2017 and Resolution 1300/2014 with regard to the need to develop such a document and use it when serving the disabled and travelers with reduced mobility at a specific passenger station. The Resolution [10], in point 6.4, states as follows: "every station must have such a document in place; it must include relevant infrastructural and technical conditions. If such a strategy is non-existent, **it must be supplemented by 31 December 2017".**

The Domestic Plan for implementing technical specifications for interoperability, referring to the availability of the EU railway system for the disabled and persons with reduced mobility (TSI PRM) [8], signed by the Ministry of Infrastructure and Construction, in Section 6.1, raises this issue as well. The document emphasizes the following:

- the need to develop a strategy "At this point, it is necessary to note that the aforesaid written strategy must be elaborated separately for each passenger station",
- the need to respect point 6.4 of the amended resolution on the Transport Plan "Each station must have such a document in place; it must include relevant infrastructural and technical conditions. If such a strategy is non-existent, it must be supplemented by 31 December 2017. At present, works aimed at preparing the strategy by the aforesaid deadline are being performed".

Further in the document we can find: "It must be emphasized that, despite the lack of these documents, actions aimed at improving accessibility (so far 101 railway stations), providing assistance (61 railway stations) and personnel training are being taken".

In March 2018, the Ministry of Investment and Development published and held a public consultation on the governmental program called "Accessibility PLUS" [6]. It assumes investments related to the improvement of accessibility in eight areas in the years 2018-2025 to the amount of 23 billion PLN: architecture, transportation, digitization, education, health, culture, competitiveness and coordination. In the actions of 5 (available rail transport) and 6 (repair and reconstruction of 200 railway stations) dedicated railways, it is planned to initiate operations intended to improve infrastructure, pursuant to the requirements of TSI PRM. Since 2018, the program has assumed the development of the strategy of access to passenger infrastructure for all disabled persons and persons with reduced mobility, along with traffic rules for every railway station and implementation through relevant procedures and personnel training.

According to the authors of this article, passenger stations still have not adopted any access strategies.

5. Method of developing the strategy along with traffic rules for passenger stations

The Railway Research Institute, supporting the Department of Transport in the process of developing a series of strategic documents for railways, prepared an elaboration under its own works [11]. This presented a method facilitating the development of strategies of access to every passenger station for all travelers, including the disabled and persons with reduced mobility, on the basis of detailed information concerning the specific infrastructure facility. All the information essential from the point of view of the strategy was divided into 12 thematic units. The substantive scope of particular sets of information served as an input in the survey prepared to compile photographs of the existing conditions of passenger stations. The particular thematic units include the following information:

- **A.** General information on passenger stations. This field of information applies to identification data, such as the name of the station, address, telephone and e-mail address, administrative location and position in the railroad network and in relation to the city/town and its status, rank of the station as well as head(s) (operator) of the facility. In this field, the term "*other data*" may include information related to heritage conservator supervision over the facility, which may result in a slightly different approach to satisfying the requirements arising from TSI PRM.
- **B.** Use of passenger stations. This field encompasses information on the current use of the railway station by rail carriers and public transport operators, with regard to train timetables. There are rail carriers whose trains have commercial stops at the station. Additionally, agreements between the head of the station and carriers as well as the volume of particular kinds of passenger trains and their number are specified. There is also a time-connection between transport services in the same mode of transport and integration between different modes of transport.

- **C. Technical condition of passenger stations.** This field demonstrates information on the technical and functional condition of the passenger station. It pertains to modernization works (completed or scheduled) related to the entire facility or its elements (e.g. main hall, platforms). In this part, the accessibility of particular facility elements, existing restrictions and related needs improving access to rail transport for the disabled and persons with reduced mobility are diagnosed. The range of data includes a certificate of subsystem CE verification.
- **D.** Access to passenger stations. In this field, a method and possible access as well as passageways to the passenger station are defined. The parameters concerning these issues apply to the location of the yard in front of the railway station, location of the car park, number of parking places for the disabled, number of passageways, their location and route, as well as the possibility of using them by the disabled. This part also involves the nature of particular passageways and, for example, the availability of touch components which facilitate access to the passenger station. At this point, it is important that all types of infrastructural obstacles which limit accessibility are listed.
- **E.** Entrance doors to railway station buildings. This field specifies the entrance doors, including the type, way of opening, marking and possibility of opening them by disabled travelers and persons with reduced mobility.
- F. Infrastructure dedicated to travelers after they have entered through the entrance doors. This field provides information and data related to infrastructure for travelers. It describes the availability of touch items which help blind and visually impaired travelers use and move around the station, as well as specifying the hearing support systems. The description and parametrization from the point of view of accessibility for the disabled and persons with reduced mobility covers the following positions and facilities:
 - ticket office,
 - ticket machine,
 - information desks and traveler's desks,
 - toilet,
 - waiting room,
 - service and trade outlets.
- **G. Passenger information**. This field includes a separate description of three groups of information, that is, visual, acoustic (sound) and touch. The range of data concerns the presentation of train timetables, megaphone announcements and display methods, clarity and consistency of information given, as well as hearing support systems and signs used by blind and visually impaired persons, such as paths, warning lines, typhlographic maps and Braille descriptions on stairway railings.

- **H. Obstacle-free routes**. This field describes passageways devoid of obstacles which allow the free movement of travelers, including persons with reduced mobility, and the marking of routes and their equipment in access-facilitating devices, such as platform lifts and regular lifts. In this field, there are also guarded level crossings which meet the parameters listed in TSI PRM, suitable marking, personnel supervision and use by the disabled in order to provide access to the platforms.
- I. Platforms. This field concerns the description of all active and operated platforms at the passenger station/passenger stop. The information includes such platform properties as type, altitude, type of surface, availability of passenger information system and small architecture elements, as well as devices and elements which facilitate access, lighting, division into sectors and specification of places in which trains transporting persons in wheelchairs stop.
- **J. Stations without supporting personnel.** A description of the field focuses on alternative ways of purchasing tickets by blind or visually impaired persons when ticket machines are accessible.
- K. Personnel's assistance in getting on and off the train. This field specifies the personnel's assistance in the access to the rail transport services and access to information on this kind of service. In particular: who fulfills these duties and the personnel's competence with regard to administering help to persons with various health dysfunctions.
- L. Other information. This applies to supporting the personnel's qualifications and training as well as adherence to procedures which specify the principles of using facilities available at the passenger station. When the passenger station is limited in terms of accessibility, it is necessary to state when the aforesaid limitations will be eliminated. There can be scheduled deadlines for plant modernization, reconstruction or renovation.

Based on the information collected in the survey, a strategy is elaborated. Its primary element is traffic rules related to facility accessibility for the disabled and persons with reduced mobility.

6. Conclusions

Previous actions aimed at improving the accessibility of railway infrastructure for travelers have been reinforced through the provisions of a new act [10], thanks to which every passenger station will be surrounded by space available to everyone. It will be commonly required to provide access to public utility infrastructure in Poland, which explicitly dispelled the previous doubts of some owners or administrators. Pursuant to the applicable rules of law, every passenger station must adopt a strategy which allows the disabled and persons with reduced mobility to be served, as well as traffic rules.

To perform this duty, the Railway Research Institute developed an instrument which supports every passenger station – regardless of its size – in preparing such a document. It has been discussed in Chapter 5 of this article. This is very important because every year brings new facilities which, through investment works, become available to all travelers. In the next couple of years, 200 passenger stations will provide full accessibility. This will also apply to facilities supervised by the heritage conservator. There will also be new kinds of facilities, such as systemic railway stations, where accessibility for all users is the basis for designing them.

Literature

- Decyzja Komisji z dnia 21 grudnia 2007 r. dotycząca technicznej specyfikacji interoperacyjności w zakresie aspektu "Osoby o ograniczonej możliwości poruszania się" transeuropejskiego systemu kolei konwencjonalnych i transeuropejskiego systemu kolei dużych prędkości (notyfikowana jako dokument nr C (2007) 6633) (Tekst mający znaczenie dla EOG) (2008/164/WE) (Dz.U. L 64/72 z 7.3.2008) [Commission's Decision dated 21 December 2007 on technical specifications for interoperability with regard to "Persons with reduced mobility" of the trans-European conventional railway system and trans-European high-speed railway system...].
- Krajowy plan wdrażania technicznych specyfikacji interoperacyjności, odnoszących się do dostępności systemu kolei Unii dla osób niepełnosprawnych i osób o ograniczonej możliwości poruszania się (TSI PRM) [Universal design – adaptation of railway to transportation of the disabled Ministerstwo Infrastruktury i Budownictwa], Warszawa, 2017 r. https:// ec.europa.eu/transport/sites/transport/files/rail-nip/ nip-prm-tsi-poland.pdf [access 26.06.2019].
- Opinia Rady Legislacyjnej z 22 lutego 2019 r. o projekcie ustawy o dostępności [Opinion of Legislative Council on draft law on accessibility of 22 February 2019] https://radalegislacyjna.gov.pl/dokumenty/opinia-z-22-lutego-2019-r-o-projekcieustawy-o-dostepnosci [access 27.06.2019].
- Poliński J.: Elementy dotykowe dla niewidomych rodzaje, rozwiązania i wymagania ogólne [Touch elements for the blind – types, solutions and general requirements], Kolejowa Oficyna Wydawnicza, Warszawa 2012.
- Poliński J.: Projektowanie uniwersalne dostosowanie kolei do przewozu osób niepełnosprawnych [Universal

design – adaptation of railway to transportation of the disabled], Instytut Kolejnictwa, Warszawa 2012.

- Polska bardziej przyjazna. Ruszyły konsultacje programu Dostępność Plus [More friendly Poland. Consultations to the Accessibility Plus program have started], Ministerstwo inwestycji i Rozwoju 15.03.2018, https://www.miir.gov.pl/strony/aktualnosci/polskabardziej-przyjazna-ruszyly-konsultacje-programudostepnosc-plus/ [access 26.06.2019].
- Projekt ustawy o dostępności osobom ze szczególnymi potrzebami [A draft law on accessibility for persons with special needs], Rządowe centrum legislacji 13 czerwca 2019 r. https://legislacja.rcl.gov.pl/projekt/12319302/katalog/12575748#12575748 dostęp: 27.06.2019 (Projekt Ustawy o zapewnianiu dostępności osobom ze szczególnymi potrzebami. Wersja projektu z dnia 13.06.2019 r. Rządowe Centrum Legislacji).
- Rozporządzenie (WE) NR 1371/2007 Parlamentu Europejskiego i Rady z dnia 23 października 2007 r. dotyczące praw i obowiązków pasażerów w ruchu kolejowym 5 [Resolution (CE) NO. 1371/2007 of the European Parliament and Council dated 23 October 2007 on rights and obligations of railway passengers], (Dz.U. L 315/14 z 3.12.2007).
- 9. Rozporządzenie Komisji (UE) NR 1300/2014 z dnia 18 listopada 2014 r. w sprawie technicznych specyfikacji interoperacyjności odnoszących się do dostępności systemu kolei Unii dla osób niepełnosprawnych i osób o ograniczonej możliwości poruszania się [Commission's Resolution (EU) NO. 1300/2014 dated 18 November 2014 on technical specifications for interoperability referring to accessibility of the EU railway system for the disabled and persons with reduced mobility] (Tekst mający znaczenie dla EOG) (Dz.U. L 356/110 z 12.12.2014).
- 10. Rozporządzenie Ministra Infrastruktury i Budownictwa z dnia 8 grudnia 2016 r. zmieniające rozporządzenie w sprawie planu zrównoważonego rozwoju publicznego transportu zbiorowego w zakresie sieci komunikacyjnej w międzywojewódzkich i międzynarodowych przewozach pasażerskich w transporcie kolejowym [Resolution of the Minister of Infrastructure and Construction dated 8 December 2016 amending the resolution on the sustainable public transport development plan in the transportation network in inter-provincial and international railway passenger transportation] (Dz.U. 2016, poz.1996).
- 11. Wróbel I., Poliński J.: Opracowanie metody niezbędnej do sporządzenia strategii gwarantującej pełną dostępność infrastruktury pasażerskiej zgodnie z wymaganiami TSI PRM [Elaboration of the method required to develop the strategy ensuring full availability of passenger infrastructure in accordance with requirements of TSI PRM], Instytut Kolejnictwa, Praca nr 8730/11, Warszawa 2018.