

Railway Infrastructure Access Rates in the Context of the COVID-19 Pandemic

Agata POMYKAŁA¹

Summary

Railway infrastructure access rates, as an important element of the costs affecting the services offered to railway clients, are an object of interest in the context of transport sustainability and the promotion of railway transport. The pandemic caused by the SARS-CoV-2 coronavirus has spawned a crisis that has affected the railway sector in a significant way. In October 2020, the European Commission published a Regulation establishing measures for a sustainable rail market in view of the COVID-19 pandemic. The European Commission's initiative of introducing a Regulation allowing for derogations from existing laws, as well as satisfying the urgent needs of the railway sector for the duration of the effects of the pandemic, may be a significant step towards a permanent leveling of the playing field for all of the branches competing in the transport sector. This article presents information in terms of the legal regulations concerning the charges for infrastructure use and outlines the assumptions of Regulation 2020/1429 (EU) of the European Parliament and of the Council.

Keywords: railway, cost of access to infrastructure, transport sustainability, COVID-19

1. Introduction

The issue of equal opportunities, including in terms of the competition between the particular branches of transport with respect to the costs of access to infrastructure, is one of the most important elements in the context of transport sustainability and the limitation of external costs related to transport operation [1, 12, 30]. The charges for access to infrastructure are specified in EU and national regulations and are an object of interest of NGOs, which claim that equaling these charges would be a determining factor in stopping the decrease of the share of railways in the transport market [11].

The difficulties affecting the entire rail sector as a result of the COVID-19 pandemic have caused the European Commission to take actions intended to facilitate managing the consequences of the pandemic and satisfy the urgent needs of the sector for the duration of those consequences. Regulation 2020/1429 of the European Parliament and of the Council of 7 October 2020 establishing measures for a sustainable rail market in view of the COVID-19 outbreak recommends i.a. reducing, deferring, and even waiving the charges for using railway infrastructure that are imposed on railway carriers, as well as waiving reser-

vation charges [17]. Irrespective of the uniqueness of the situation in which these actions were taken, they may be an important step towards ensuring equal opportunities in terms of competition between transport branches, which has been advocated by the European Commission for years [29].

2. Legal situation in terms of the costs of access to infrastructure

This chapter presents the most important documents regarding charges for access to railway infrastructure, issued in the European Union and Poland.

2.1. European Union regulations

Significant changes related to the functioning of the railway sector in Europe commenced in the last decades of the 20th century and were focused on increasing the competitiveness of railways and making the sector operate more in line with market principles. They concerned physical, technical, and organizational barriers seriously impeding the free transport of both persons and goods. The White Paper [3] published on

¹ M.Sc. Eng.; Senior Specialist, Unit for Coordination of Project and International Cooperation; e-mail: apomykala@ikolej.pl.

14 June 1985 by the European Commission with respect to supporting the process of creating the internal market contained the propositions and goals in terms of transport that were planned for implementation by 1992. The first significant document that initiated liberalization was Directive 91/440/EEC [8], which, by introducing a division into accounts for freight transport and accounts for passenger transport, was the point of departure for separating infrastructure management from transport operations. Furthermore, it laid down the principles of opening the European market by extending the right of access to infrastructure in a Member State to railway operators from other Member States wishing to provide international combined transport services and associations of railway operators wishing to provide international transport services between the countries in which they are based [26]. The issue of collecting charges for access to infrastructure is regulated in Directive 95/19/EC [5], in which, in order to ensure greater integration of the railway sector and achieve sustainable development, the need to guarantee fair competition was raised, i.e. by means of setting access rates in consideration of the nature and duration of the service, the market situation, and the infrastructure condition; the Directive also specifies a framework for allocating capacity.

Council Directive 91/440/EEC and Council Directive 95/19/EC did not guarantee a significant differentiation in terms of the structure and level of charges for railway infrastructure and the form and duration of the processes of allocating capacity. This is why the next step was Directive 2001/14/EC, which was published in 2001 and in which:

- 1) in order to ensure transparency and non-discriminatory access to rail infrastructure for all railway carriers, it was recommended to publish, in a network statement, all the necessary information required to use access rights;
- 2) it was recommended that the charging and capacity allocation schemes should permit equal and non-discriminatory access for all undertakings and encourage railway infrastructure managers to optimize the use of their infrastructure, at the same time providing incentives for infrastructure managers to make appropriate investments where they are economically attractive;
- 3) the importance of ensuring better coordination of allocation schemes in order to ensure the improved attractiveness of rail was emphasized;
- 4) it was pointed out that it is desirable to define those components of the infrastructure service which are essential to enable an operator to provide a service and which should be provided in return for minimum access charges;
- 5) in view of the need to establish appropriate and fair levels of infrastructure charges, it was recom-

mended to infrastructure managers that they record and establish the valuation of their assets and develop a clear understanding of cost factors in the operation of the infrastructure;

- 6) it was stated that infrastructure charging should be set at the cost that is directly incurred as a result of operating the train service;
- 7) it was emphasized that external costs should be taken into account when making transport decisions [6].

The need for further changes, transformations, and combining the above Directives into one legal act as part of a recast of the first railway package resulted in the publication of Directive 2012/34/EU [7] in 2012. Chapter IV of the Directive concerns the levying of charges for the use of infrastructure and allocation of railway infrastructure capacity, specifying, in section 2, the rights and obligations of both Member States and infrastructure managers with respect to the charges for infrastructure and services. Currently, Directive 2012/34/EU applies across the entire European Union.

2.2. National regulations

In Poland, the process of actually separating transport operations from infrastructure operations was initiated by separating the PKP Polskie Linie Kolejowe (PKP PLK) company and transport companies (including PKP Cargo, PKP Przewozy Regionalne, PKP Intercity) under the Polish Law of 8 September on the Commercialization and Privatization of the “Polskie Koleje Państwowe” State Enterprise [27]. The Polish Law of 28 March 2003 on Railway Transport [28] specified in detail the tasks of the entities involved in operations on the railway market, including:

- the scope of responsibility of PKP PLK S.A., including providing train paths for the passage of trains on railway lines and the provision of related services;
- the principles of allocating access to railway infrastructure and the calculation and collection of charges for this access.

Subsequent amendments to that Law reflected the changes occurring on the Polish market e.g. due to the need to align Polish legal regulations with European Union legislation. The documents implementing statutory principles were the successive Regulations of the ministers responsible for transport:

- 1) the Regulation of the Polish Minister of Infrastructure of 7 April 2004 regarding the Terms of Access to and Use of Railway Infrastructure [22];
- 2) the Regulation of the Polish Minister of Transport of 30 May 2006 regarding the Terms of Access to and Use of Railway Infrastructure [23];

- 3) the Regulation of the Polish Minister of Infrastructure of 27 February 2009 regarding the Terms of Access to and Use of Railway Infrastructure [21];
- 4) the Regulation of the Polish Minister of Infrastructure and Development of 5 June 2014 regarding the Terms of Access to and Use of Railway Infrastructure [19];
- 5) the Regulation regarding the Terms of Access to and Use of Railway Infrastructure [18]; currently (i.e. as at 29/09/2020) in force, as amended by the Regulation of the Polish Minister of Infrastructure of 23 November 2018 amending the Regulation regarding the Access to the Railway Infrastructure [20].

According to the current Regulation regarding the Access to the Railway Infrastructure (published in 2017 and amended in 2018) [18, 20], the provisions concerning the system of collecting charges for the Access to the Railway Infrastructure remain in force until 12 December 2020. Chapter 10 of the said Regulation concerns the charges imposed by the infrastructure manager in connection with allocating capacity, specifying: the scope of responsibility of PKP PLK, laying down i.a. the obligation to make railway routes available to trains and to provide the related services:

- the method of determining the charge for examining the application for allocation of capacity (§ 19);
- the method of determining the reservation charge for failure to use the allocated capacity (§ 20, § 23.1);
- the method of determining the unit rate for the basic charge (§ 21);
- the principles of determining reductions with respect to the basic charge (§ 22);
- the method of determining the maneuvering charge (§ 24).

The access charges, as an element that strongly affects the costs incurred by carriers, have been criticized for many years [10] and are also an object of interest in the context of striving for balance between branches of transport, ensuring the sustainability of transport, and increasing the chances for railways to become more competitive. Regulations in terms of equaling the conditions of providing transport services between various branches of transport are being implemented rather slowly in Poland. The requests coming from the railway sector over a number of years and concerning discriminatory treatment, e.g. in terms of payment for access to infrastructure by railway carriers, remained unheard until 2013 when the European Court of Justice pointed out the irregularities in terms of transposing EU law and ordered an immediate reduction in Polish rates for access to railway infrastructure, to the level of exclusively the direct costs of railway traffic. This resulted in the charges for access to infrastructure dropping by approx. 20%, starting from the 2013/2014 timetable.

The action for failure of a Member State to fulfill obligations with respect to compliance with Directives 91/440 and 2001/14 was brought by the European Commission on 26 October 2010. The judgment of the European Court of Justice in case C-512/2010 was passed in 2013, with the Court concluding that: “by failing to adopt incentives to encourage the railway infrastructure manager to reduce the costs of providing infrastructure and the level of access charges, and by permitting the inclusion, in the calculation of charges levied for the minimum access package and track access to service facilities, of costs which cannot be regarded as costs directly incurred as a result of operating the train service, the Republic of Poland has failed to fulfill its obligations under Articles 6(2) and 7(3), respectively, of Directive 2001/14/EC of the European Parliament and of the Council of 26 February 2001 on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification, as amended by Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004.”

3. Regulation 2020/1429 of the European Parliament and of the Council

Responding to the crisis caused by the SARS-CoV-2 coronavirus that affected logistics and freight-forwarding companies and infrastructure managers in H1 2020, the European Commission (EC) prepared a draft of a Regulation establishing measures for a sustainable rail market in view of the COVID-19 pandemic [15]. The Regulation was adopted on 7 October 2020 [17]. This legal act contains a recommendation of reducing, deferring, and even waiving charges for access to rail infrastructure and waiving reservation charges. Its provisions also allow Member States to shorten the period for the payment of the compensation related to losses caused by reducing the income of infrastructure managers [14].

The purpose of the Regulation is to supplement the existing legal framework in the railway sector, so as to facilitate coping with the effects of the pandemic and satisfy the urgent needs of the sector for the duration of these effects. According to assumptions, targeted derogations from Directive 2012/34/EU will have a positive effect on maintaining the integrity of the single European railway area. The legal basis for the Regulation are Articles 90 and 91 of the Treaty on the Functioning of the European Union concerning common transport policy and the rules applicable to international transport access conditions for carriers [4].

Due to the importance and urgency of the proposed temporary measures, the draft presented by

the EC on 19 June 2020 was covered with the urgent procedure provided for in Rule 163 of the Rules of Procedure of the European Parliament. The agenda of the Council meetings of 7 July and 26 August 2020 included the draft Regulation and amendments were made to the text. On 2 September 2020, the text was debated on during a meeting of the Committee on Transport and Tourism (TRAN) of the European Parliament [24]. Then, the members of the European Par-

liament adopted the Regulation. The Regulation was published on 7 October 2020 and came into effect on the following day, once published in the Official Journal of the European Union.

3.1. Scope of amendments to the Regulation

The measures proposed by the European Commission (Tabl. 1) primarily concern reducing, deferring,

Table 1

Changes resulting from Regulation 2020/1429 [own compilation based on [17]]

Existing regulation	Scope of the existing regulation	Proposed derogation
Article 31(3)	Track access charges The charges for the minimum access package are set at the cost that is directly incurred as a result of operating the train service. The provision in principle stands in the way of the charges being set at a lower level.	The derogation should allow Member States and infrastructure managers to have the widest range of possibilities at their disposal during the reference period.
Article 32	Mark-ups Article 32 allows Member States to provide for the levying of mark-ups set in relation to the ability to pay of the respective rail market segments. As such, this principle implies that mark-ups may be subject to fluctuations and are liable to decrease in case the ability to pay of the given market segment decreases. Such decreases may in particular occur as a consequence of the current crisis. However, as Directive 2012/34/EU currently stands, amendments to mark-ups are in principle not possible in the course of a given working timetable period.	It is proposed to enable Member States to allow downward adjustments in respect of the reference period.
Article 36	Reservation charges The objective of such charges is to discourage railway undertakings from canceling train paths at short notice and therefore to promote the best and full use of existing capacity. Usually the level of this charge increases the closer the cancellation is to the time of operation. Under Article 36 of Directive 2012/36/EU, it is in principle up to each infrastructure manager to decide whether it wishes to levy reservation charges. However, the third sentence of Article 36 renders the levying of those charges mandatory in case of “regular failure” by a railway undertaking “to use allocated paths or part of them.”	It is appropriate to enable Member States to lift the obligation established by the third sentence of Article 36 of the Directive in respect of cancellations during that period.
Article 8(4)	Refund by Member States In respect of each of the items referred to above (charges based on direct cost, mark-ups and reservation charges), any decreases in charges as authorized by Member States in accordance with the Regulation proposed would generate income losses on the part of the infrastructure manager. Those income losses would in principle be subject to compensation and Member States are under the obligation to ensure that the accounts of infrastructure managers facing losses due, inter alia, to unexpected lower demand, remain balanced over a period of 5 years under normal business conditions. The income losses for infrastructure managers, entailed by decreases as contemplated in the proposed Regulation, would by definition not occur under Directive 2012/34/EU as it currently stands.	Making it possible for infrastructure managers to be refunded within a period shorter than the one established in Article 8(4) of that Directive, i.e. by 31 December of the year following the year in which the loss was incurred.
Article 8(4)	Adjustments of the network statement The network statement sets out in detail the general rules, deadlines, procedures and criteria for charging and capacity-allocation schemes, including information for applications for infrastructure capacity.	Introduction of a stipulation that the network statements should be kept up to date and amended without delay.

or waiving charges for accessing rail infrastructure and waiving reservation charges. They apply to the reference period from 1 March 2020 to 31 December 2020 during which the charges may be modified by derogation from Article 27 of Directive 2012/34/EU according to which the network statement (including the applicable charges) is to be published no less than four months in advance of the deadline for submitting requests for infrastructure capacity. Any reduction in charges authorized by Member States in accordance with the Regulation would entail income losses on the part of the infrastructure manager. Those income losses are, in principle, subject to compensation within 5 years, in accordance with Article 8(4) of Directive 2012/34/EU. Given the extraordinary character of those losses, infrastructure managers should be refunded within a shorter period, namely by 31 December of the year following the year in which the loss was incurred.

4. Railway infrastructure access rates

In Europe, between 2014 and 2018, the average infrastructure access rate per train-km increased for passenger services, especially in 2018. In the case of freight transport, the average access rate per train-km remained constant between 2014 and 2017. In 2018, the rate was reduced mainly due to Germany introducing limits for average railway transport rates (an initiative of the German government related to the implementation of plans to move transport from roads to railways; the funding in this respect is EUR 350M per year) [9]. This decrease and the tendency for increases in the case of passenger transport have resulted in a growing difference between the average access rates per train-km for passenger and freight transport. Figure 1 pres-

ents the changes in the average rate for the minimum railway infrastructure access package in 24 European states between 2014 and 2018 (excluding Estonia, Ireland, Kosovo, North Macedonia, Serbia, Sweden, and Switzerland). Figure 2 presents the average rate for the minimum railway infrastructure access package in Poland in 2018 in comparison with other European Union Member States.

In recent years, the Polish market has seen a tendency to lower the average unit rate of the charge for minimum access to the infrastructure managed by PKP PLK S.A. For passenger trains, under the 2018/2019 and 2019/2020 timetables, this rate is PLN 6.1/train-km, while for freight trains, it stands at PLN 12.8/train-km [25].

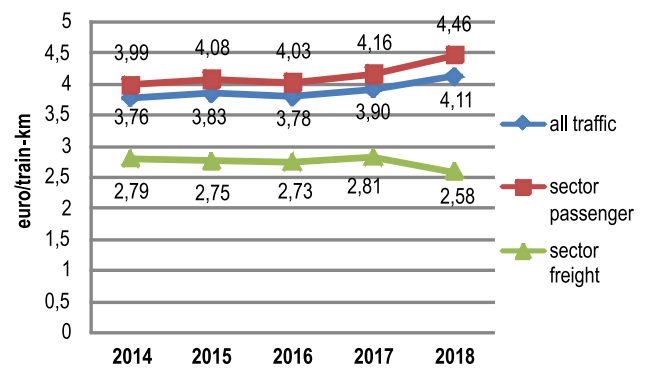


Fig. 1. Average rate for the minimum railway infrastructure access package in 24 European states between 2014 and 2018, in EUR/train-km (excluding Estonia, Ireland, Kosovo, North Macedonia, Serbia, Sweden, and Switzerland); own compilation based on [9]

Charges for infrastructure access are a major item in the budgets of carriers.² The downward tendency observed over recent years is related i.a. to infrastruc-

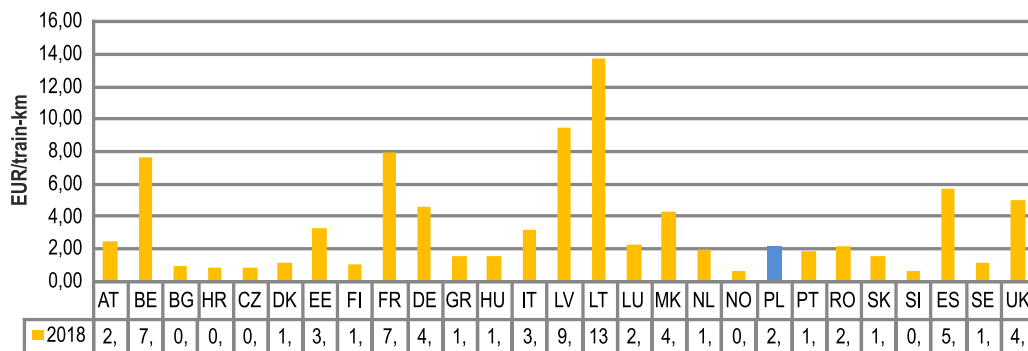


Fig. 2. Charges (average rates for entire traffic) for the minimum railway access package in particular European countries in 2018, in EUR; own compilation based on [9]

² Regardless of unit rates, the costs of access to railway infrastructure incurred by carriers are also affected by the volume of transport work carried out.

ture managers reducing rates, an increase in intermodal traffic, and the operators using vehicles for which a reduction may be obtained and selecting routes with lower access rates. The significant percentage difference in the years 2010–2014 is related to the actions taken by the European Commission in order to speed up the implementation of the first railway package in Poland, which ended with the 2010 action brought to the ECJ and the Court’s judgment in case C-215/2010 of 30 May 2013. Figure 3 presents this cost in the PKP Cargo S.A. Group in PLN, while Figure 4 presents it in percentage terms. Figure 5 presents changes in the volume of operational work, while Figure 6 shows changes in the value of the unit access rate. In the analyzed period (2010–2019), the unit access rate decreased by 40%.

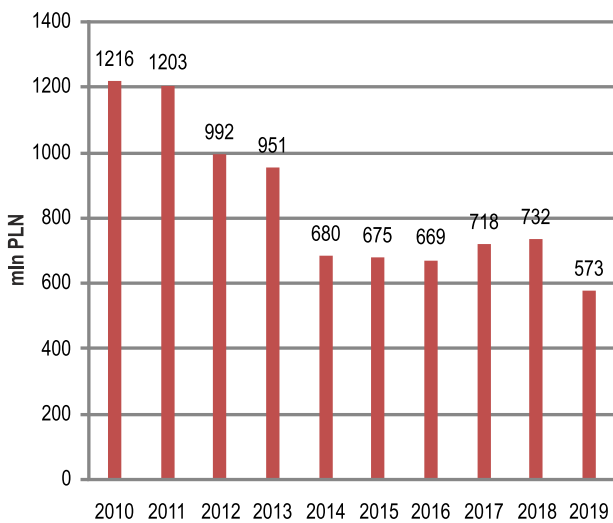


Fig. 3. Costs of access to railway infrastructure in the PKP CARGO S.A. Group between 2010 and 2019 [own compilation based on the information received from PKP Cargo S.A.]

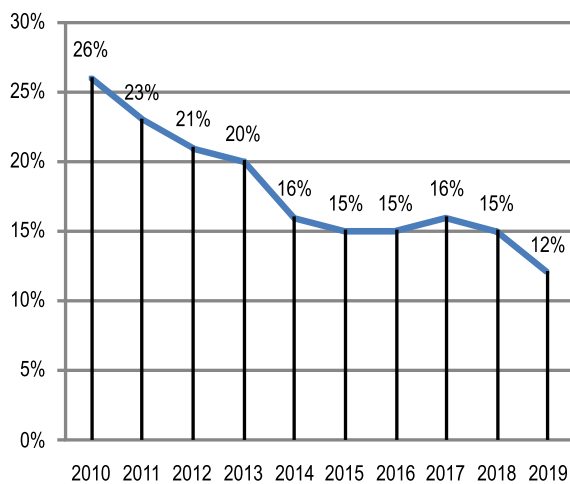


Fig. 4. Share of costs of access to railway infrastructure in the operating costs of the PKP CARGO S.A. Group between 2010 and 2019 [own compilation based on the information obtained from PKP Cargo S.A.]

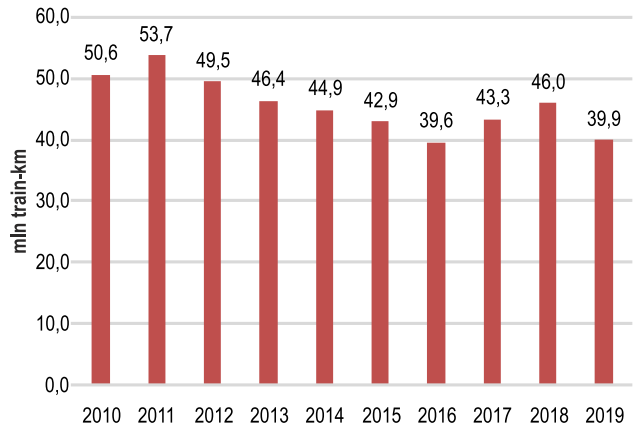


Fig. 5. Changes to the operational work volume in the PKP CARGO S.A. Group between 2010 and 2019; own compilation based on [16]

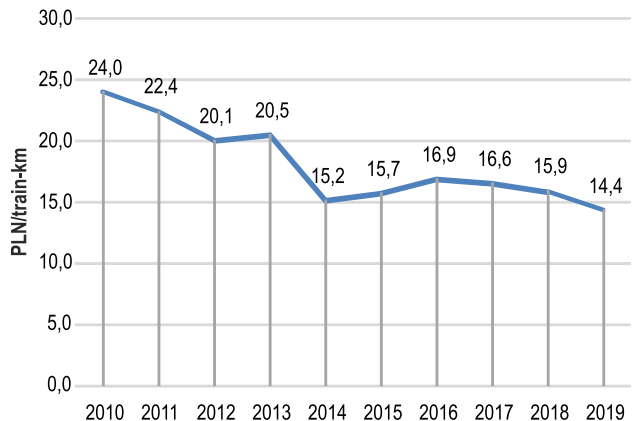


Fig. 6. Changes to the unit value of the access rate in the PKP CARGO S.A. Group between 2010 and 2019; own compilation based on [16]

In the case of freight transport carried out by the PKP CARGO S.A. Group in the 2019/2020 season, the charges for using railway infrastructure include:

- a minimum access charge, covering:
 - the basic charge for minimum access to railway infrastructure, as related to train runs, including the reservation charge for not using all or some of the route and for decreasing the number of freight transports;
 - a maneuvering charge;
 - a charge for stopping for at least 2 hours on tracks that do not constitute service infrastructure facilities;
- charges for using service infrastructure facilities [13].

4. Conclusions

Contemporary economic growth and development concepts put more and more emphasis on the need to ensure sustainable development, which means such use of the available natural resources that guarantees

their availability to future generations. This includes e.g. promoting rail transport as more ecological than road or air transport. The actions taken by the European Commission in this respect have been intended to create incentives, including financial ones, for the development of railways and the limitation of other forms of transport. One of the financial tools used as part of transport policy are state subsidies allowing reductions in railway infrastructure access rates. The draft Regulation prepared by the European Commission allows a significant increase in the support for the railway sector, which means more sustainability in transport. This could be a major step towards leveling the playing field for all of the competing transport branches. Reducing the costs of providing transport services will allow the expenses incurred by the beneficiaries of railways to be limited. Furthermore, during the difficult period of the crisis caused by a decrease in the number of train runs due to the COVID-19 pandemic, this Regulation will be a major form of direct support in view of the magnitude of the infrastructure access costs in the carriers' budgets.

References

- Antonowicz M.: *Kolej musi wpisywać się w założenia polityki zrównoważonego rozwoju* [Railway must be in line with the assumptions of the sustainable development policy], 2017, <https://kurier-kolejowy.pl/aktualnosci/31096/kolej-musi-wpisywac-sie-w-zalozenia-polityki-zrownowazonego-rozwoju.html>, 01/09/2020.
- Case C-512/10, European Commission v Poland, Action under Article 258 TFEU for failure to fulfill obligations, brought on 26 October 2010, <http://curia.europa.eu/juris/document/document.jsf?jsessionid=C787E58E645CBA270CDF379D22AAE5E3?text=&docid=137833&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=4331289> [accessed on 01/09/2020].
- Completing the Internal Market: The Commission White Paper, Commission of the European Communities, Milan 1985.
- Consolidated Version of the Treaty on the Functioning of the European Union, Official Journal of the European Union C 326, 26 October 2012, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=CS>.
- Council Directive 95/19/EC of 19 June 1995 on the allocation of railway infrastructure capacity and the charging of infrastructure fees, Official Journal of the European Communities L 143, 27 June 1995, pp. 75–78.
- Directive 2001/14/EC of the European Parliament and of the Council of 26 February 2001 on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification, Official Journal of the European Communities L 75, 15 March 2001.
- Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (recast), Official Journal of the European Union L343, 14 December 2012.
- Directive 91/440/EEC of 29 July 1991 on the development of the Community's railways, Official Journal of the European Communities L 237, 24 August 1991.
- Eighth Annual Market Monitoring Report, IRG-Rail, 2020.
- Engelhardt J.: *Problemy metodyczne kalkulacji stawek dostępu do infrastruktury kolejowej* [Methodological problems of the calculation on the access fee to railway infrastructure], TTS Technika Transportu Szybowego, 2013, nr 4, s. 16–24.
- <https://www.seim-tsz.pl> [online access: 19.09.2020].
- Kwarciański T.: *Dostęp do infrastruktury jako składnik kosztu wytworzenia usługi transportowej na przykładzie transportu samochodowego i kolejowego* [Access to infrastructure as component of production of transport service costs on the example of road and rail transport], Zeszyty Naukowe Uniwersytetu Szczecińskiego, 2014, t. 26/2014, nr 814, s. 67–82.
- PKP Cargo ma umowę dostępową z PKP PLK na 2019/2020 za szac. 608,9 mln zł netto [PKP has an access agreement with PKP PLK 2019/2020 for about PLN 608,9 million] 2019, <https://www.money.pl/gielda/pkp-cargo-ma-umowe-dostepowa-z-pkp-plk-na-2019-2020-za-szac-608-9-mln-zl-netto-6452653196216449a.html> [accessed on 18.08.2020].
- Pomykała A.: *Propozycje legislacyjne Komisji Europejskiej w zakresie pomocy przewoźnikom kolejowym w ograniczeniu skutków COVID-19* [Legislation proposals of the European Commissions aimed to help railway carriers with regard to fight COVID-19 impact], TTS Technika Transportu Szybowego, 2020, nr 7–8, s. 63–67.
- Proposal for a Regulation of the European Parliament and of the Council establishing measures for a sustainable rail market in view of the COVID-19 pandemic, COM(2020) 260 final, European Commission, Brussels, 19/06/2020, vol. 0127.
- Raporty roczne Grupy PKP Cargo S.A. [Annual reports of the PKP Cargo S.A. Group].
- Regulation (EU) 2020/1429 of the European Parliament and of the Council of 7 October 2020 establishing measures for a sustainable rail market in view of the COVID-19 outbreak, Official Journal L 333/1 of 12/10/2020.
- Rozporządzenie Ministra Infrastruktury i Budownictwa z dnia 7 kwietnia 2017 r. w sprawie udostępnienia

- niania infrastruktury kolejowej [Regulation of the Polish Minister of Infrastructure and Construction of 7 April 2017 regarding the Making of Railway Infrastructure Available], Dz.U. 2017, poz. 755.
19. Rozporządzenie Ministra Infrastruktury i Rozwoju z dnia 5 czerwca 2014 r. w sprawie warunków dostępu i korzystania z infrastruktury kolejowej [Regulation of the Polish Minister of Infrastructure and Development of 5 June 2014 regarding the Terms of Access to and Use of Railway Infrastructure], Dz.U. 2014 r., poz. 788.
 20. Rozporządzenie Ministra Infrastruktury z dnia 23 listopada 2018 r. zmieniające rozporządzenie w sprawie udostępniania infrastruktury kolejowej [Regulation of the Polish Minister of Infrastructure of 23 November 2018 amending the Regulation regarding the Making of Railway Infrastructure Available], Dz.U. 2018, poz. 2280.
 21. Rozporządzenie Ministra Infrastruktury z dnia 27 lutego 2009 r. w sprawie warunków dostępu i korzystania z infrastruktury kolejowej [Regulation of the Polish Minister of Infrastructure of 27 February 2009 regarding the Terms of Access to and Use of Railway Infrastructure], Dz.U. nr 35, poz. 274.
 22. Rozporządzenie Ministra Infrastruktury z dnia 7 kwietnia 2004 r. w sprawie warunków dostępu i korzystania z infrastruktury kolejowej [Regulation of the Polish Minister of Infrastructure of 7 April 2004 regarding the Terms of Access to and Use of Railway Infrastructure], Dz.U. nr 83, poz. 768.
 23. Rozporządzenie Ministra Transportu z 30 maja 2006 roku w sprawie warunków dostępu i korzystania z infrastruktury kolejowej [Regulation of the Polish Minister of Transport of 30 May 2006 regarding the Terms of Access to and Use of Railway Infrastructure], Dz.U., nr 107, poz. 737).
 24. Scordamaglia D.: *Measures for a sustainable rail market in view of the coronavirus pandemic*, European Parliament, 2020.
 25. Sprawozdanie z funkcjonowania rynku transportu kolejowego 2019 [Report on the functioning of the rail transport market 2019], Urząd Transportu Kolejowego, Warszawa, 2020.
 26. The Cost of Non-Europe in the Single Market in Transport and Tourism – I. Road Transport and Railways, Steer Davies Gleave, European Union, Brussels, June 2014.
 27. Ustawa z 8 września 2000 r. o komercjalizacji, prywatyzacji przedsiębiorstwa państwowego „Polskie Koleje Państwowe” [The Polish Law of 8 September 2000 on the Commercialization and Privatization of the “Polskie Koleje Państwowe”], Dz.U. 2000, nr 84, poz. 948, z późniejszymi zmianami.
 28. Ustawa z dnia 28 marca 2003 r. o transporcie kolejowym [The Polish Law of 28 March 2003 on Railway Transport], Dz.U. 2003, nr 86, poz. 789.
 29. White Paper. Road map to Single European Transport Area – Towards a competitive and resource efficient transport system, com 2011 144 final, Bruxelles, 28.03.2011 r., <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0144&from=EN>.
 30. Zwiększenie roli kolei w równoważeniu transportu towarów w Polsce. Wyzwania, propozycje, dobre praktyki [Increasing the role of railways in balancing the transport of goods in Poland. Challenges, proposals, good practices], Urząd Transportu Kolejowego, Warszawa, 2019.