OLSZTYN ECONOMIC JOURNAL

Abbrev.: Olszt. Econ. J., 2014, 9(4)

THE EUROPEAN UNION TRANSPORT POLICY AND THEIR CONSEQUENCES FOR THE INFRASTRUCTURE DEVELOPMENT IN POLAND IN 2014–2020. PART I

Wacław Szymanowski

Department of Quantitative Methods University of Warmia and Mazury in Olsztyn

Key words: transport infrastructure, EU Common Transport Policy.

Abstract

The paper discusses the origins and future determinants of regional development, as conditioned by the present state of transport infrastructure considered as a key endogenic factor of the development of economic regions. Increased Cohesion Policy spending, at the level of EUR 82.3 billion, in the newly opened EU multiannual financial framework for 2014–2020 aims at reducing development disparities between various EU regions and, thus, enhancing the cohesion of the EUROPEAN ECONOMIC AREA. The paper outlines the evolution of the objectives of the COMMON TRANSPORT POLICY over the last 20 years, which have a significant impact on the level of spatial cohesion and contribute to better competitiveness, reliability of transport services, their safety and environmental friendliness.

POLITYKA TRANSPORTOWA UNII EUROPEJSKIEJ I JEJ KONSEKWENCJE W ROZWOJU INFRASTRUKTURY W POLSCE W LATACH 2014–2020. CZEŚĆ I

Wacław Szymanowski

Katedra Metod Ilościowych Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: infrastruktura transportowa, wspólna polityka transportowa UE.

Abstrakt

W artykule omówiono genezę oraz uwarunkowania rozwoju regionalnego na podstawie aktualnego stanu infrastruktury transportowej stanowiącej główny czynnik endogeniczny rozwoju regionów gospodarczych. Wzrost wydatków na politykę spójności w wysokości 82,3 mld euro w budżecie Unii Europejskiej na lata 2014–2020 ma na celu zmniejszenie zróżnicowania rozwoju między

poszczególnymi regionami Unii Europejskiej i spowodowanie podwyższenia spójności europejskiej przestrzeni gospodarczej. Przedstawiono ewolucję celów wspólnej polityki transportowej, mających istotny wpływ na poziom spójności przestrzennej w ostatnich dwudziestu latach, a przez to przyczyniających się do wzrostu konkurencyjności i niezawodności usług transportowych oraz ich bezpieczeństwa i przyjazności dla środowiska naturalnego.

Introduction, research objectives and methodology

The paper presents the origins and the future determinants of regional development, as conditioned by the present state of transport infrastructure – one of the key endogenic factors of the development of economic regions. Expenditure on the Cohesion Policy in the newly opened EU multiannual financial framework for 2014–2020 has increased by EUR 82.3 billion with the aim of reducing development disparities between various regions of the European Union, which as such, has undergone important changes over the last 20 years. The paper will discuss 3 options for policy outcomes, for the period until 2020 and further, and their possibly divergent implications. Part I will detail the diagnosis of disparities in regional development levels and will present changes in transport policy priorities occurred until this date. Part II will cover the presentation and assessment of future transport policy options.

Both parts will be based on the following methodologies:

- Methodology used to study investment attractiveness of regions-voivodships, as suggested by the Institute for Market Economic (Instytut Badań nad Gospodarką Rynkową – IBGR), based on the comparative analysis of national official documents from 2006–2010 (GAWLIKOWSKA-HUECKEL 2000, p. 13, Atrakcyjność inwestycyjna województw i podregionów Polski 2006, 2007, 2008, 2009, 2010);
- External factors cover also European Transport Policy; the changes of its priorities over the last 20 years and the scenarios of its development in 2014–2020 perspective will be discussed in the second part of the paper. They will be presented through the comparison of documents elaborated by international and national institutions.

Notion of infrastructure

Infrastructure, its diversification, as well as cohesion, seen as a product of the influence of external policies, and transport policy among them, are basic notions to be used univocally throughout the paper.

Infrastructure refers to the combination of "infra", meaning "under", and "structure", understood as an orderly system used as a basis for other

facilities. One may distinguish the "superstructure" which comprises manufacturing, mining and agriculture, and "infrastructure" defined as the total of tangible public capital. The superstructure is defined as the total of intangible public capital. In the mid – 1960, reference literature differentiated between economic and social infrastructure. Economic infrastructure ensures direct support for human manufacturing activities and covers roads, motorways, ports, sewage systems, as well as water and energy supply networks, while social infrastructure is meant to include: education system, public security, public housing, waste treatment plants, hospitals, sport and leisure facilities.

Hence, infrastructure is made of systems which have been permanently localized and organized and which provide services for public and private institutions and for the society as a whole.

In today's reference literature, M. Ratajczak defines infrastructure as "a set of equipment items and institutions which provide services vital for the functioning or development of a given system or its part, (RATAJCZAK 1999, p. 11). Infrastructure bears the following basic features (WOJEWÓDZKA-KRÓL 2010, p. 18, BRZOZOWSKA 2002, pp. 127–140):

- technical, economic and spatial indivisibility, entailing the need for long-term planning and the involvement of State and international (EU) institutions in its financing; this is also in itself a tool for preventing economic slowdown (ROLBIECKI 2011);
- a long period of construction and use, resulting in its capital and asset-intensiveness and, in consequence, a prolonged period of freeze of investment expenditure and substantially delayed investment returns;
- immobility which exposes the contradiction between infrastructure localized in a specific place and the development of new markets and emerging transport needs linked to evolving economic integration tendencies. They result in discrepancies in spatial competitiveness.

Notions of infrastructure and cohesion in the context of regional development

The notions of infrastructure and spatial cohesion refer to relations between urbanization centers and remote areas, hard to access by means of transport, called peripheries. Peripherality is deemed to be determined by such basis factors as: insufficient access to transport systems with a local, national and international reach and the lack of connections with political and economic centers at national and EU level. Due to such location the access to Community markets is hampered, which slows down economic development and reduces

regional competitiveness. Too big discrepancies between regions are prejudicial to both peripherial regions (due to drainage of active resources) and wealthy regions (due to cohesion-congestion phenomena), and, in consequence, to the integration grouping as a whole. That's why measures taken in the EU within the framework of the regional development policy and the cohesion policy aim at improving social cohesion across the Community. Cohesion may be understood in territorial, social and economic terms.

Territorial cohesion (*Green Paper*... 2008) means a network of mutual connections among several aspects of modern space of life, including: economic, transport, environmental, developmental and social ones. It translates into reduced spatial conflicts, more balanced development potentials between regions and less negative development outcomes which may stem from individual regional features and the specificity of global markets. Cohesion may be understood in territorial, social and economic terms.

Social cohesion aims at reducing disparities between regions in the use of human resources, and is measured with employment or unemployment rates.

Economic cohesion consists in reducing development disparities between wealthier and poorer regions, and is measured with Gross Domestic Product per capita, considering the purchasing price parity.

Spatial cohesion consists in eliminating barriers in access to peripheral regions through their improved connectivity with central regions, and is measured with the average travel time to a given area, by air or by road.

Thus, in the context of spatial analysis, infrastructure may fulfill the following roles:

– related to economy, i.e. economic and technical infrastructures. In general, economic infrastructure covers services which facilitate manufacturing and selling processes, i.e. warehousing processes, as well as economic organizations, financial institutions, technical and sanitary advisory services, trade and restaurants and tourism. Technical infrastructure is made of basic facilities, equipment and installations. i.e. roads, bridges, energy grids, telecommunication networks and water and sewage networks, with a service function vital for the proper functioning of rural communities¹; and

¹ Logistical infrastructure covers transport infrastructure which, in turn, comprises road networks and transport routes, transport, stay and transshipment points for goods and people, and auxiliary equipment used to operate such roads and transport points. See also: Ciesielski, Szudrowicz (2001). Apart from transport infrastructure, logistical infrastructure covers information circulating between users of transport networks and points. The *Logistics Terminology Glossary* defines logistical infrastructure as the system of land, water and airways, air, maritime, as well as rail ports and telecommunication networks located in a given area. According to the systemic approach to logistics, logistical infrastructure has three components: lines, points and communication-information infrastructure.

– social, understood as all civilization structures and institutions as well as factors and conditions of social life, in most cases of intangible nature, covering upbringing and education, sport and leisure, culture, healthcare services, sport-related activities, public and local administration and public security.

Infrastructure may fulfill, among all, the following functions:

- transfer function, ensuring that goods, energy, financial flows and information can travel across and services are provided to beneficiaries;
- location function which allows for reaching an appropriate access to: transport, energy, water and sewage, gas and telecommunication networks or to manufacturing, servicing and administration sites;
- acceleration function, where the level and the dynamics of changes may become the accelerating factor for the development of specific regions;
- integration function, closely connected with an area serviced by a given factor.

All the above mentioned functions may either accentuate spatial economic and social disparities or reduce them and foster economic, social and spatial regional cohesion, depending on prevailing strengths or weaknesses of infrastructure².

Conditions favorable for an improved spatial, economic and social cohesion in the EU and for equal competitive chances in terms of free flow of goods, people and information are to be achieved through transport policy, with investments in infrastructure performed across the European Union as its basic tool, and based on a comprehensive approach and integrated measures at the community, national, regional and local level, involving private sector and citizens. The Common Transport Policy is one of the three oldest common policies, and has been in existence since the Treaty of Rome, signed in 1957. On the onset, its aim was to stimulate the development of transport sector understood in quantitative terms. However, changes in the operation of EU mechanisms induced the need to define new objectives of the EU policy and the instruments of its implementation. Those evolutions brought about changes in the Common Transport Policy whose implementation in the upcoming 2014–2020 financial framework will be conditioned by the level of financial inputs and by priorities which set diverse paces for the emergence of the Common European Economic Area. Therefore, technical and social infrastructure, and more broadly land management and planning, will play an increasingly important role in regional development. Underdeveloped infrastructure in a given geographic area may be harmful to natural environment, living conditions of its inhabitants, and, most of all, to social and economic develop-

² Among weaknesses of transport infrastructure one may list: usage and disintegration of land, permanent integration with land planning scheme, possible breach of hydrographic conditions due to noise and gas emissions, water, air and soil pollution.

ment of regions. Technical and social infrastructures are then key supporting factors to fuel regional development, together with human capital, knowledge, innovation and employment (RAKOWSKA, WOJEWÓDZKA-WIEWIÓRSKA 2010).

The diversification of the regional development policy toolbox will depend on the specific nature of each of its components and on the impact power of mega-tendencies, as discussed above, on a global scale, on the EU market, on national, regional or local markets. Moreover, it will be determined by the following measures:

- general measures, i.e. measures which may be, without no change in form, used effectively in different conditions of operation of regional markets, for the benefit of a diversified group of beneficiaries. Such measures may include investments in technical, economic and social infrastructure;
- flexible measures which require adaptation, depending on the conditions of operation, targeting a diversified group of beneficiaries, e.g. payment schemes for the use of infrastructure;
- specialized measures which should address the needs of a defined group of beneficiaries, e.g. payments for maintaining landscape or architecture values.

At the same time, technical, economic and social infrastructure, as one of endogenic factors, will become the foundation of development at a regional and local scale, provided that competent authorities lay down adequate conditions for its use. And such use will also require prospecting new sources of financing.

EU common transport policy and stages of its implementation

The aim of the Common Transport Policy, subject to modifications at present, will be to ensure competitive, reliable, safe and environment friendly modalities of transportation for people and goods. The transport system under construction should comply with the principle of sustainable transport development, i.e. transport development which responds to changes in demand, in harmony with the needs of society in terms of freight and movement of persons inside the EU and outside its borders, using natural resources in a sound manner³. This will lead to a better economic efficiency, a higher satisfaction

 $^{^{\}rm 3}$ The sustainable transport system development aims at ensuring for present and future generation:

⁻ the access to destinations, in a safe manner, not harmful to environment or health;

⁻ the fuelling of economic and regional development;

⁻ the choice of the means of transport;

⁻ the reduction of emissions and of waste, considering natural environment absorption capacities;

the use of non-renewable resources in quantities which may be rebuilt or replaced by renewable sources;

with a better quality of transport services, and the reasonable use of natural resources (especially non-renewables). The Common Transport Policy should meet the following conditions:

- 1. Satisfy future transport needs in terms of transfer in space and in time of shipments and people, while ensuring the cohesion of connections;
- 2. Implement the said tasks by defining development priorities for each transport subsector, considering their present share in the fulfillment of such needs; and
- 3. Shape the heritage of the past without encroaching on existing architectural solutions and material culture, and by protecting wildlife against microclimate changes. Thus, infrastructure, with its long lifespan, would have a durable impact on land planning and management. Therefore, in the context of emerging sustainable transport system and the transport services market liberalization, the objectives of the transport policy should be implemented through the adoption of new solutions: technical (quality standards), organizational and legal ones, considering economic, social and spatial threats related to natural environment protection.

The Common Transport Policy was implemented in 3 sub-periods, each time with different objectives and implementation tools, defined in 3 separate documents⁴.

Beginnings of the European Transport Policy in 1992–2000

The First White Paper was drafted in 1992 (COM (92) 494 final) to define the future of the transport sector in the EU and its integration into the EU structures. It was based on 10 future transport corridors. In the said period the main objective regarding the comprehensive approach to the construction of the transport system in the European Union and its integration within the European single market was to put in place, in 1994, of the TEN-T Program (Trans-European Networks-Transport). In the Treaty of Maastricht, Trans-European Transport Networks were covered by community financing from

⁻ the reduction to minimum of technology-intensiveness and noise emissions.

[&]quot;Defining an Environmentally Sustainable Transport System". Commission Expert Group on Transport and Environment Working Group, September 2000.

⁴ The First White Paper: The future development of the common transport Policy. A global approach to the construction of the Community framework for sustainable mobility, COM (92) 494 final, Brussels, December 1992, Bulletin of the European Communities, Supplement 3/93; The Second White Paper: European Transport Policy for 2010, time to decide, COM (2001) 370 final, Brussels, September 2001. Guidelines for the Third White Paper were formulated in the Draft CTP Program until 2020: A sustainable future for transport: Towards an integrated, technology-led and user-friendly system, COM (2009), 279/4.

the EU budget with the view of creating a single and harmonized system, based on multimodal infrastructure.

Since 1995, Poland has been involved in the TINA Program (Transport Infrastructure Needs Assessment). The fundamental purpose of this network is to build ten Pan-European Transport Corridors to span over Central and Southern European counties of which four will cross Poland. These are:

Corridor I: from Warsaw, via Białystok–Suwałki, to Polish–Lithuanian border in Budzisko/Trakiszki, with the ramification to the Polish-Russian border in Gronowo/Grzechotki and to Elblag and Gdańsk;

Corridor II: Świecko/Kunowice at the Polish–German border, via Poznań–Warsaw to Terespol, at the border with Belarus;

Corridor III: Zgorzelec/Olszyna, via Krzyżowa-Wrocław-Opole-Katowice--Cracow-Rzeszów, to the Polish-Ukrainian border in Medyka/Korczowa;

Corridor IV: Gdańsk/Gdynia, via Warsaw-Katowice to the Polish-Slovakian border in Zwardoń, with the ramification towards Grudziądz-Poznań-Katowice, to the Czech border in Zebrzydowice.

In the said period a number of programs were defined⁵; however their outcomes depended mainly on the level of actual investment, and were of limited reach for Poland.

Enhanced role of infrastructure in regional development in 2001–2010

The Second White Paper, of 2001, amended under the mid-term review process in 2006, included the program for laying down the foundations of the common EU transport area, based on the sustainable mobility principle. The Second White Paper was to implement the basic aim: the one of building the coherent economic area, using all transport modes in a competitive manner. The White Paper of 2001, in its 2006 reviewed version, stated that the development of car transport had been incommensurably slower than rail and other modes, resulting in congestion, i.e. crowding of transport networks. This led to the introduction of the notion of co-modality which refers to the effective use of various means of transport either independently or jointly in order to achieve the optimal and sustainable exploitation of resources.

⁵ Among the examples of such programs one may quote: Polish Transport Policy, Ministry of Transport and Maritime Economy, Warsaw, 1994; Transport Infrastructure Development Plan until 2015, Ministry of Transport and Maritime Economy, Warsaw, 1997; State Transport Policy for 2000–2015 for Sustainable Development, Warsaw, 2000; Program for the Adaptation of the Polish Road Network to the European Union standards, Warsaw, 2001; Amended Motorway Construction Program, Ministry of Infrastructure, Warsaw 2002; Program of the Construction of Motorways and other National Roads 2002-2005, Ministry of Infrastructure, Warsaw, 2002.

In 2006, the new edition of the White Paper included amended priorities of the common transport policy: programs which streamlined the use of natural resources were limited and the focus was shifted to legislation which would foster a more fair competition, which, in turn, should ensure better cohesion, better competitiveness across the Community and a better quality of life for EU citizens. New priorities covered, among all (WOJEWÓDZKA-KRÓL 2010):

Firstly, the elimination of bottlenecks and missing links in the Trans-European Transport Network by building logistic centers in order to ensure the use of a more environmentally friendly technologies of intermodal transportation, i.e. the use of the same container transported with various means of transport.

Secondly, the support, through investment measures, of specific, environmentally friendly infrastructure, such as alternative networks, e.g. high-speed railways or the maintenance and extension of inland waterways etc.

Thirdly, the use of structural investment design methods with less impact on natural environment.

Implementation of the transport policy in 2007–2013

This period saw the transformation of the transport development concept towards a more sustainable one with the aim of reducing as much as possible the negative impact of new transport infrastructures on the environment. In Poland, it should mean more focus on the development of environmentally friendly infrastructure, sectors and technologies, in particular inland waterways, high-speed railway, logistic centers and Intelligent Transport Systems. In fact, funds committed to its realization in the European Operational Program "Infrastructure and Environment" are testimonial to the role of transport infrastructure in the construction of technologically, spatially, economically, socially and environmentally sustainable transport system in Poland. Those commitments, together with national co-financing, amounted to EUR 28 billion, while direct EU funding dedicated to the development of the Polish transport infrastructure totaled EUR 19.4 billion, including EUR 11.1 billion for road transport, EUR 4.8 billion for railway transport and EUR 2 billion for urban transport.

However, the economic crisis of 2009–2010, with all its negative consequences for the economy (decrease in the level of transport services, especially by rail) revealed new opportunities for the development of logistical infrastruc-

⁶ Road infrastructure expenditure reached its peak in 2011, amounting to PLN 26.4 billion, and fell in 2013 to PLN 8 billion. Inversely, railway infrastructure expenditure totaled PLN 3.7 billion in 2010, and increased in 2013 to PLN 5,2 billion. In: *Logistyka w Polsce, Raport 2011* (2012).

ture. New possibilities emerged thanks to the decrease in prices of construction materials and of labor costs and the shortening of investment cycles as construction companies were left with extra free production capacities.

Conclusions

The paper discusses mega-tendencies and spatial conditions for regional development in 2020-2030, and even until 2050. The European Transport Policy should create conditions of change in order to ensure the adaptation to new circumstances imposed by sustainable development requirements. The policy can be implemented via further construction of the network transport system, based on co-modality and the use of new technologies and energy sources at the voivodship and sub-region levels. Transport and technical infrastructure are key determinants of the present and future evolutions of the economic, social and environmental space. And their role will increase in the next ten years, considering unprecedented (and discussed herein) EU-wide spending on the construction of modernized and cohesion-driven European Economic Area. In the first four years of 2007–2013 planning perspective, the use of infrastructure spending was insufficient, which may now lead to the realization of policy option I, as suggested by the World Bank.

That is why more in-depth studies are needed to probe into factors which stimulate the demand in equipment and institutions which determine the smooth operation of functionally differentiated rural areas and of their business environment, as they may become hurdles to their sustainable development in future.

Translated by Joanna Ruszel

Accepted for print 30.12.2014

References

- Atrakcyjność inwestycyjna województw i podregionów Polski 2006. 2006. Ed. T. Kalinowski. Authors: A. Hildebrandt, T. Kalinowski, M. Nowicki, P. Susmarski, M. Tarkowski. Instytut Badań nad Gospodarką Rynkową, Gdańsk.
- Atrakcyjność inwestycyjna województw i podregionów Polski 2007. 2007. Ed. T. Kalinowski. Authors: A. Hildebrandt, T. Kalinowski, M. Nowicki, P. Susmarski, M. Tarkowski. Instytut Badań nad Gospodarka Rynkowa, Gdańsk.
- Atrakcyjność inwestycyjna województw i podregionów Polski 2008. 2008. Ed. T. Kalinowski. Authors: A. Hildebrandt, T. Kalinowski, M. Nowicki, P. Susmarski, M. Tarkowski, A. Kawiak. Instytut Badań nad Gospodarką Rynkową, Gdańsk.
- Atrakcyjność inwestycyjna województw i podregionów Polski 2009. 2009. Ed. M. Nowicki. Authors: A. Hildebrandt, M. Nowicki, P. Susmarski, M. Tarkowski. Instytut Badań nad Gospodarką Rynkową, Gdańsk.
- Atrakcyjność inwestycyjna województw i podregionów Polski 2010. 2010. Ed. M. Nowicki. Authors: A. Hildebrandt, M. Nowicki, P. Susmarski, M. Tarkowski. Instytut Badań nad Gospodarką Rynkową, Gdańsk.

- Biała księga. Plan utworzenia jednolitego europejskiego obszaru transportu dążenie do osiągnięcia konkurencyjnego i zasobooszczędnego systemu transportu. 2011. SEK(2011) 359 wersja ostateczna; SEK(2011) 358 wersja ostateczna; SEK(2011) 391 wersja ostateczna; KOM (2011)144, wersja ostateczna. Komisja Europejska, Bruksela.
- Brzozowska K. 2002. Infrastruktura publiczna jako kategoria ekonomiczna. Ekonomista, 1.
- Charakterystyka obszarów wiejskich w 2008 r. 2010. Główny Urząd Statystyczny, Urząd Statystyczny w Olsztynie.
- Ciesielski M., Szudrowicz A. 2001. *Ekonomika transportu*. Wyd. Akademii Ekonomicznej w Poznaniu, Poznań.
- Drejerska N. 2011. Infrastruktura transportowa w polskich politykach: regionalnej przestrzennej. Logistyka, 6: 5161–5164.
- Drejerska N. 2011. Przyszłość transportu w Europie konieczność integracji polityk Unii Europejskiej. Logistyka, 6: 5165–5167.
- Elektroniczna gospodarka w Polsce. Raport 2008. 2009. Instytut Logistyki i Magazynowania, Poznań. Gawlikowska-Hueckel K., Hildebrandt A., Umiński S. 2001. Atrakcyjność inwestycyjna województw Polski. Polska Regionów, 13. Instytut Badań nad Gospodarką Rynkową, Gdańsk.
- Gołembska E. 2008. Kompendium wiedzy o logistyce. Wyd. Naukowe PWN, Warszawa.
- Green Paper on Territorial Cohesion. Turning territorial diversity into strength. 2008. {SEC(2008) 2550} COM(2008) 616 final. Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee. Commission of the European Communities, Brussels.
- Grosse T.G., Hardt Ł. 2010. Sektorowa czy zintegrowana, czyli o optymalnej strategii rozwoju polskiej wsi. Pro Oeconomia Fundacja Ewaluacji i Badań Ekonomicznych, Warszawa.
- Grzywacz W., Wojewódzka-Król K., Rydzykowski W. 2003. *Polityka transportowa*. Wyd. 3. Wydaw. Uniwersytetu Gdańskiego, Gdańsk.
- Logistyka w Polsce, Raport 2011. 2012. Ed. I. Fechner, G. Szyszka. Seria: Biblioteka Logistyka. Instytut Logistyki i Magazynowania, Poznań.
- MINDUR M. 2006. Transport w gospodarce [In:] Uwarunkowania rozwoju systemu transportowego Polski. Ed. B. Liberadzki, L. Mindur. Instytut Technologii Eksploatacji, Radom.
- Nierebiński R., Pawlak H. 2012. Łączność szerokopasmowa w Polsce. Logistyka, 3.
- Pawłowska B., Bak M., Borkowski P. 2012. Poprawa integracji gałęzi transportu oraz elementów sieci transportowych działaniem na rzecz realizacji europejskiej polityki transportowej. Logistyka, 2.
- Polityka transportowa państwa na lata 2006-2025. 2005. Ministerstwo Infrastruktury, Warszawa.
- Polska dokument dotyczący polityki transportowej. W kierunku zrównoważonego rozwoju transportu lądowego. 2011. Raport nr 59715PL, Europa i Azja Centralna. The World Bank. On line: http://siteresources.worldbank.org/POLANDEXTN/Resources/Poland_TPN_Final_Web_Feb25_POL_OK.pdf.
- Program budowy dróg krajowych na lata 2011–2015. 2011. Ministerstwo Infrastruktury, www.mi.gov.pl.
- RAKOWSKA J. 2011. Transformacja przysztej wspólnej polityki transportowej UE. Logistyka, 3.
- Rakowska J., Wojewódzka-Wiewiórska A. 2010. Zróżnicowanie przestrzenne obszarów wiejskich w Polsce stan i perspektywy rozwoju w kontekście powiązań funkcjonalnych. Ekspertyza wykonana na zamówienie Ministerstwa Rozwoju Regionalnego, Warszawa.
- RATAJCZAK M. 1999. Infrastruktura w gospodarce rynkowej. Wyd. Akademii Ekonomicznej w Poznaniu. Poznań.
- Rolbiecki R. 2011. Wykorzystanie funduszy unijnych na infrastrukturę transportową w Polsce w warunkach spowolnienia gospodarczego. Logistyka, 1.
- Strategia rozwoju transportu do roku 2020 (perspektywa do 2030). Projekt z 30 marca 2011 r., Ministerstwo Infrastruktury, Warszawa.
- Szymanowski W. 2008. Zarządzanie łańcuchami dostaw żywności w Polsce. Kierunki zmian. Difin, Warszawa.
- White Paper. The future development of the common transport Policy. A global approach to the construction of the Community framework for sustainable mobility. 1992. Communication from the Commission Document drawn up on the basis of COM(92) 494 final. Bulletin of the European Communities, Supplement 3, Brussels.

- White Paper. European Transport Policy for 2010, time to decide. 2001. COM (2001) 370 final, Commission of the European Communities, Brussels.
- White Paper. A sustainable future for transport: Towards an integrated, technology-led and user friendly system. 2009. Commission of the European Communities, Com(2009) 279/4, Communication from the Commission, Brussels.
- Wojewódzka-Król K. 2010. Problemy rozwoju infrastruktury transportu w Polsce w świetle tendencji unijnych. Logistyka, 3.
- Wojewódzka-Król K. 2012. Infrastruktura transportu wobec współczesnych wyzwań. Logistyka, 1.
- Wojewódzka-Król K., Rolbiecki R. 2009. *Infrastruktura transportu*. Wydaw. Uniwersytetu Gdańskiego, Gdańsk.
- Wojewódzka-Wiewiórska A. 2010. Infrastruktura jako czynnik rozwoju lokalnego. Logistyka, 3: 1–13. Wspólne propozycje Grupy Wyszehradzkiej odnośnie rewizji sieci TEN-T. 2011. Ministerstwo Infrastruktury i Rozwoju. On line: www..mi.gov.pl.
- Zielona księga. TEN-T: Przegląd polityki w kierunku lepiej zintegrowanej transeuropejskiej sieci transportowej w służbie wspólnej polityki transportowej. 2009. KOM (2009), wersja ostateczna, Bruksela.