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

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Key words: transport infrastructure, EU Common Transport Policy, Transport Policy options.

#### Abstract

In part I of the paper discussed the evolution of the objectives of the COMMON TRANSPORT POLICY over the last 20 years, of a major impact on the level of spatial cohesion achieved, and ensuring competitive, reliable, safe and environmentally friendly transport opportunities. On that basis, dilemmas regarding the outcomes of their implementation after 2020 until 2050 are analyzed. 3 options for policy outcomes are formulated: POLICY OPTION I suggesting the pursuit of the applicable policy, i.e. the completion of the construction of the motorway network in Poland, with possible difficulties for the State budget. POLICY OPTION II assumes that there will be a shift of some road traffic onto rail following the launch of an adequate fee and toll policy, decreasing the burden placed on car transportation. Finally, POLICY OPTION III delineates the perspective of a sustainable and durable transport development thanks to appropriate allocations of funds, and, in consequence, an improved competitiveness of national traffic and the completion of the construction of motorway infrastructure. The choice of policy option may have dramatic implications as to Poland's ability to manage its development opportunities ahead.

#### POLITYKA TRANSPORTOWA UNII EUROPEJSKIEJ I JEJ KONSEKWENCJE W ROZWOJU INFRASTRUKTURY W POLSCE W LATACH 2014–2020 CZĘŚĆ II

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Słowa kluczowe: infrastruktura transportowa, wspólna polityka transportowa UE, warianty polityki transportowej.

#### Abstrakt

W części I artykułu przedstawiono ewolucję celów wspólnej polityki transportowej, mających istotny wpływ na poziom spójności przestrzennej w ostatnich dwudziestu latach, a przez to zapewniających wzrost: konkurencyjności i niezawodności usług transportowych oraz ich bezpieczeństwa i przyjazności dla środowiska naturalnego. Na tej podstawie określono skutki ich realizacji po 2020 r., w perspektywie do 2050 r. Sformułowano trzy warianty konsekwencji tej polityki: wariant I zakładający kontynuację dotychczasowej polityki polegającej na zakończeniu budowy sieci autostrad w Polsce, co spowodowałoby określone problemy budżetu państwa; wariant II przyjmujący przesunięcie części ruchu drogowego do sektora kolejowego dzięki odpowiedniej polityce opłat i taryf, co odciążyłoby przewóz samochodowy, oraz wariant III zakładający zrównoważony i trwały rozwój transportu dzięki odpowiedniej alokacji zasobów finansowych. Spowodowałoby to zwiększenie konkurencyjności ruchu krajowego po dokończeniu budowy infrastruktury autostrad. Wybór jednej z tych alternatyw może mieć istotne znaczenie dla wykorzystania bądź niewykorzystania szansy rozwojowej jaka stanęła przed naszym krajem.

#### Introduction, research aim and methodology

The 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 across various regions of the EU, which, over the last 20 years, has undergone important changes. Part II of the paper covers the presentation and assessment of 3 options of the future transport policy. In both parts the following analytical methods have been used:

- Methodology applicable for the study of 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 (see: Gawlikowska-Hueckel2000, *Atrakcyjność inwestycyjna...* 2006–2010);
- External factors cover also the 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 this part of the paper. They will be presented through the comparison of documents elaborated by international and national institutions.

# Recommendation of the world bank and eu institution regarding transport policy until 2025

In documents concerning the future Common Transport Policy, from reports of international institutions, e.g. the World Bank reports, to national strategic documents delineating orientations for infrastructure development, special attention has been paid to the discussion on policy priorities until 2030, and even until 2050, as well as to threats to its implementation.

In February 2011, the World Bank published its Report on the Polish transport network. The Report: "Poland. Transport Policy Note – Towards a Sustainable Land Transport, 2011" took into account the effectiveness of the institutional system in place and existing forms of infrastructure financing. The analysis covered the applicable transport policy. Based on this, key reservations and recommendations were formulated and 3 policy reform options were elaborated, considering new orientations of infrastructure development included in national documents established until 2020 and 2030.

The World Bank Report challenged the applicable transport policy priorities aiming at improving road mobility through road investments as potentially dangerous to sustainable growth of the whole sector. It listed, among all, the following threats (Chłopek, 2012):

- lack of consideration of climate impact on transport policy and the need to include GHG emissions to transport charges;
- insufficient measures to improve traffic safety in cities and in non-urban areas;

Regarding the sources of financing, the Report points, among all, to:

- limitation of increasing road maintenance replacement investments;
- bigger share of extra-budgetary sources of financing, considering the need to balance national budget revenue and expenditure and the actual fund levels in the future EU budget;
- diversification of sources of financing for road maintenance and new road construction leading to self-financing and consisting in shifting the burden of charges onto users responsible for the material wear of road infrastructure.

The recommendations would ensure the implementation of objectives thanks to the use of following instruments:

- consistent implementation of the "user pays" model in which the user covers the costs of their responsibility for the degradation and wear of roads during exploitation;
- increase of payments from users by augmenting direct charges, taxes and levies on fuel prices, combined with reduced payments from the State budget;
- streamlining of road toll levels in order to promote the competitiveness of other transport sectors.

Following the above mentioned analysis, 3 policy reform options were formulated. Policy Option I defined as priority road mobility and further implementation of the respective investment program co-financed with EU funds. The negative impact of that option was identified as a deteriorated financial, economic and environmental sustainability due to the involvement of domestic and EU funds in further road investments, which, in the long term will cause environmental pollution.

Policy Option II assumes a shift of a small part of road traffic onto rails thanks to the reduction of charges for access to railway infrastructure and the increase of charges for road users and fuel costs; this would expand railway traffic at the expense of car transport, and would simultaneously require the increase in financing of railway infrastructure.

Policy Option III would have the biggest impact on the objectives of sustainable and durable transport development and on better allocation of funds. The main priority would be to improve the competitiveness of railway and further investments in road infrastructure co-financed with the EU funds with the view of their completion.

The objective of "Transport 2050" Strategy, adopted by the European Commission in March 2011 was to create a Single European Transport Area, featuring a competitive and resource efficient transport system. 10 key tasks were defined, to be implemented by 2050. They may be clustered into 3 categories:

- 1. development of new technologies and launch of new fuels (among all, reduction by half of conventionally-fuelled cars (in cities) until 2030, and their total elimination until 2050.
- 2. streamlining of operation of multimodal logistic chains, resulting in shifting 30% of road freight over 300 km to rail or waterborne transport, and 50% until 2050, which would foster the development of ecological (green) and effective transport corridors. Thanks to the completion of the high-speed European railway network construction program, until 2050 the major part of medium-distance passenger transport will be transferred to rail. Earlier, until 2030, the construction of the TEN-T will have been completed and until 2050 the network will be optimized. Also until 2050, all core network airports and major maritime ports will be well-connected with passenger and freight rail infrastructure;
- 3. Improved effectiveness in use of transport modes and their infrastructure thanks to the implementation of information and transport service provision systems. Already in 2020 works will be completed on the Single European Aviation Area and a framework will be established for a European multimodal transport information, management and payment system. Moreover, there will a progressive move towards the full application of the payment system compliant with "user pays" or "polluter pays" principles. The above mentioned objective entails putting in place in Europe a transport system based on resource effectiveness and sustainable development principles, and alternative fuels, implemented within the three areas as described above. Until 2050, this will allow for the implementation of cohesion strategy in order to establish the Common European Transport System.

Thanks to a multimodal, integrated transport network, based on modern and well-designed, new technology-led infrastructure, until 2050 forecast traffic in the UE will go up by almost 80%. In order to meet these needs the concept of "green corridors" was forged; in the upcoming ten years it will be instrumental to the achievement of the objectives of the EU transport policy defined in the Third White Paper of March 2011. The concept of "green corridors" appeared already in 2007 with the view of combining, in an optimal manner, various modes of transport and, as a result, of contributing to  $CO_2$  emission reduction and to the decrease of noise generated during transport. "Green corridors" should become the testing ground for new transport technologies.

The shift in priorities operated in order to achieve sustainable development, founded on natural resources efficiency was then translated into the strategic document published by the European Commission and titled: "Roadmap towards a competitive and resource-efficient transport system" and concerning the establishment of the Single European Transport Area as one of the Europe 2020 Strategy elements. Effective transport is a key precondition for future prosperity in Europe. Infrastructure investments should be planned with the assumption of maximizing their positive impact on economic growth and of minimizing their negative impact on environment. The White Paper assumes that there will be more long-distance road traffic as well as road transport services based on emission reduction technologies.

The review of the transport policy is driven by the shift from corridor-oriented policy towards a vision of coherent EU transport network. The TEN-T Network should consist of a core network and a comprehensive network to attenuate their impact on natural environment. Minor corridors would link key corridors. Thanks to the extension and the connection of all TEN-T elements such priorities as economic and social cohesion and Single European Market could be achieved. According to the Visegrad Group's opinion of August 2011, measures taken in order to expand the European transport network should aim at ensuring a geographically balanced access to the future TEN-T components. The lack of access to the TEN-T Network could hamper the pace of economic growth of the whole EU. If specificities of Member States are taken into account during planning of the TEN-T Network accessibility, sustainable and durable transport development may be achieved for all Member States, as well as their integration with the EU Network.

## Principles for the implementation of the national transport development policy and strategy in Poland

The Trans-European Transport Network (established based on Trans-European Transport Corridors and the comprehensive network) is composed of transport infrastructure sections of international reach, with transport routes going along, dotted with transport hubs (e.g. logistic centers). The EU transport policy will focus on the construction and rehabilitation of the existing TEN-T Network. This is EU key (core) network which fulfills transport needs in terms of the free movement of persons, goods and services. The TEN-T comprehensive network is located outside the Pan-European Corridors and delineates routes in transport corridors in Central and Eastern Europe Countries (see Fig. 1). "The Draft Transport Development Strategy by 2020, with the perspective by 2030" was elaborated in March 2011 only. It aims at: "raising territorial accessibility and improving the safety of road users and the effectiveness of transport sectors through creation of a coherent, sustainable and user-friendly transport system in the national, European and global dimension". The Strategy includes modifications formulated for the TEN-T by the Visegrad Group countries in order to handle financial, social, environmental and institutional issues. Even if Poland holds some room of maneuver in defining the national transport development strategy, the timetable and financing capacities limit significantly its practical application. This is due to the structural and cohesion funds absorption rates and an increasing burden of debt of economic self-government institutions. This creates the need for Poland to adopt a long-term strategy for the recovery of investment activities in transport and logistical infrastructure, in order to ensure stable and effective sources of financing, from the EU funds, the State budget and private investors, to further expand and maintain the transport network infrastructure in a longer run.

# Development conditions of the Polish transport infrastructure in the light of the TEN-T development concept after 2010

The Trans-European Transport Network is the EU basic multimodal transport network and needs to meet the requirements enabling the free movement of persons, goods and services. Each new EU Member State agreed on network routes going through its territories, as dictated by the economic internal cohesion of the whole Union. The network setup should foster international transit via Member States' respective territories. The Polish transport infrastructure still falls behind transport infrastructure standards of the majority "Old Union" countries. Due to a poor condition of railway infrastructure, dramatically high tolls for rail track use and insufficient financial support from the State budget, the competitiveness of railway transport – a key to achieve sustainable transport development – is impaired. A bigger share of railway transport over road transport could relieve excessive-

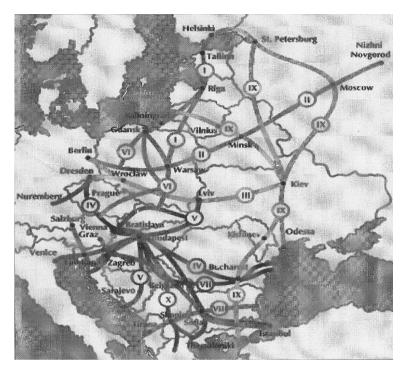
ly congested road networks, especially for long-distance transportation. Despite a 3-fold increase in access to financing for infrastructure investments, until 2009 the total of 761 km of roads had been built. In 2000–2009, the length of upgraded local commune roads increased by one third, from 60 to 80 thousand km, and the quality of public transport services remained at a low level. The level of expenditure proposed in draft 2014–2020 multiannual financial framework, as presented in June 2011, to be spent on transnational infrastructural connections within the TEN-T Network was of EUR 82,9 billion. Considering that, corridors crossing Poland (see Fig. 1) may become eligible as part of the Green Corridor Network in Europe. This will create new functional and spatial connections and new structures of territorial cooperation, and consolidate the potential of economic regional centers. The quality of other transport system components, including the quality of regional and local roads, will be of key importance in ensuring the accessibility of corridor connections.

Studies carried out by various international centers prove that transport infrastructure could fuel economic growth solely if combined with investments in human capital and its innovation. It may still give an impetus for the development of both developed and less developed regions. However, a well-developed transport infrastructure may sharpen competition and, without the active implication of infrastructural factors, including social infrastructure, it may impede economic activity in the region and cause the exodus of potential employees

Two models prevail in the debate on orientations of the future Polish regional policy: balance-oriented development model and polarization-diffusion model. The former suggests the balancing of inter-regional disparities and achieving social, economic and territorial cohesion by allocating funds to less developed regions to foster their effectiveness. The latter proposes to support growth poles by creating diffusion conditions between and inside regions. This model was reiterated in "Poland 2030" document.

### Transport network development orientations in Polish planning documents

The importance of transport, and namely road transport-related topics in the Country Spatial Planning Concept ("KPZK by 2030") is proven by the fact that 20% of expert opinions issued for its purpose concerned transport; in fact, transport was considered to be the weakest component of the Polish spatial situation. That is why one of the aims of the Draft KPZP became to improve



 ${\it Fig.~1.~Routes~of~10~Pan-European~Corridors~after~2010} \\ {\it Source:~Bulletin~rec.org/bull03/corridors.html}$ 

territorial accessibility in the country through the development of transport and telecommunication infrastructure (KPZK 2030, 2011, p. 91). The priority will be given to investments which help improve accessibility inside the country, including among major centers of the network metropolis. In the context of the Polish regional policy, KSRR 2010-2020 (National Regional Development Strategy) became the key programming document.

Transport infrastructure development should serve 2 main objectives:

- 1. Support the growth of competitive regions through the development of infrastructural connections between voivodship centers deemed to be network hubs in international and national settings; and
- 2. Establish conditions for the diffusion of development processes and for their absorption outside voivodship centers through spatial integration of voivodship areas, a higher impact of urban centers and their improved connection with sub-regional centers and rural areas. This objective is, among all, implemented through better transport accessibility to voivodship centers.

The integrated approach to development processes helps ensure economic effectiveness in a long run. The approach is reflected in the possible implemen-

tation of the second KSRR aims, i.e. building the territorial cohesion and counteracting the marginalization of "problematic" areas. The aim is implemented via the following measures:

- support for the development of regions with the lowest accessibility to communication and tele-communication goods and services, determinant for civilizational progress; and
- improving transport accessibility of voivodship centers in areas with the lowest accessibility rate thanks to the extension and rehabilitation of road and rail infrastructure in order to shorten spatial distance. Even if basic planning documents put a great focus on the implementation of the transport policy, its implementation after 2013 will significantly dependent on the level of allocated funds (See Note 7, Part I).

The adopted National Regional Development Strategy (KSRR) 2010–2020: Regions, Cities, Rural Areas, in compliance with the Green Paper on Territorial Cohesion which turns territorial diversity into a "Strength", suggests that potential resource discrepancies should be used in a better way in order to actualize the territorial dimension of the cohesion policy. The KSRR endeavors to reconcile the existing dilemma of the regional policy, i.e. equity and convergence versus efficiency and polarization, by turning territorial diversity into a "Strength". The new regional policy paradigm consists in shifting from traditional targeted redistribution of funds to a policy based on the strength of territorial potential (See Reference 1). This will entail the shift from inter and intra-regional policy towards one single policy defining for each region objectives to be attained by all public entities. Instead of implementing a short-term model with the top-down distribution of subsidies to the "most underprivileged areas", regional policy should be based on a long-term, periodically updated model with multi-sectoral, territorially-driven approach with investments carried out in order to implement decentralized regional policies supporting all regions across the board and redirecting measures so as to use their territorial endogenic features.

Such reorientation will contribute to the realization of the three objectives of mid-term development strategies with non-public sources of financing. However, it is highly improbable that sources of financing of replacement investments due to the wear of road infrastructure be based on the "user pay" principle. In fact, the implementation of the Policy Option I, as suggested in the World Bank Report, would shake the financial, economic and environmental sustainability attained thanks to the commitment of domestic funds, including extra-budgetary means, and, would compel road transport sector entities to the pursuit of polluting investments in a long time span.

The "National Road Construction Program 2011-2015" dated January 2011, takes into consideration the change of the road investments financing

scheme, carried out so far mainly with resources of the National Road Fund (KFD). It takes note, among all, of the increase of revenues from road tolls for which the payment system was launched on 1 July 2011. Despite the forecast increase of revenue from road tolls, no plans have been made to fully implement the "user pays" principle.

Thus, the World Bank Recommendations suggest the reduction of the share of public funds, including those from the State Budget, in the financing of the construction and maintenance of road infrastructure and propose to increase the share of the private sector instead. A price policy driven by the increase of express road tolls and the decrease of railway transport charges will foster the competitiveness of rail versus road, which would result in a higher GDP growth and would be compliant with the World Bank Policy Option II.

Considering the limitations of the demand side meant as financial capacity of future transport network users, the orientation formulated in the above mentioned documents regarding the Polish transport services market pave the way for the implementation of the Policy Option I. This may, in consequence, result in shaking financial, economic and environmental sustainability as domestic (including private) funding would need to be committed to pursue polluting road investments in a longer run.

#### Conclusions

The paper discusses the spatial conditions of the Polish regional development by 2020-2030 and even until 2050. The EU 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 (See Figure 1), based on co-modality and the use of new technologies and energy sources at the voivodship and sub-region levels. Transport and technical infrastructures are key determinants of present and future evolutions in 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

A new paradigm adopted for regional planning focuses on the identification of endogenic factors, with transport and communication infrastructure as major ones. This infrastructure remains a universal development tools for various types of areas: metropolitan, urban-rural and integrated rural areas, gaining in development potential thanks to the consideration of endogenic factors. They may also play a vital role for peripheral rural areas by helping them tackle barriers to their development. Studies carried out by the Institute for Market Economics in 2005-2009 reveal that in that period localization factors did not evolve and that in 2010 their stable gradation occurred. That is why more in-depth studies are needed to probe into factors stimulating 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.

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