Belarus Infrastructure Monitoring (BIM)

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The work provides analysis of reforms in railway, road, telecommunication, gas and electricity sectors in Belarus in 2009.
List of abbreviations

**BR** – Belarusian Railways
**CPI** – Consumer Price Index
**EBRD** – European Bank for Reconstruction and Development
**GET** – German Economic Team
**MTS** – Mobile Telecommunication Systems
**PPI** – Producer Price Index

Weights, measures and other abbreviations

**bcm** – billion cubic meters
**bn** – billion
**BYR** – Belarusian ruble
**eop** – end of period
**EUR** – Euro
**kW** – kilowatt
**kWh** – kilowatt-hour
**m** – million
**tcm** – thousand cubic meters
**thsd** – thousand
**toe** – tonne of oil equivalent
**tn** – trillion
**USD** – United States Dollar
**yoy** – year-on-year
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Foreword

This is the seventh issue of the Belarusian Infrastructure Monitoring (BIM). BIM was designed by the IPM Research Center, an independent research body, together with the German Economic Team in Belarus (GET). BIM is a tool used to assess the progress of structural reforms in key infrastructure industries and monitors annual changes in the infrastructure sector. The indicators developed within the BIM are intended both for monitoring the government's infrastructure policy and for research purposes.

The methodology used in BIM follows the concept of the Infrastructure Monitoring for Ukraine (IMU) of the Institute for Economic Research and Policy Consulting (IER) in Kiev, Ukraine.* This concept is based on the approach developed by the European Bank for Reconstruction and Development (EBRD), which estimates infrastructure indices for all transition countries. Since 1998, these indices have been published annually in the EBRD Transition Report.

This report presents information on the restructuring of five infrastructure sectors of the Belarusian economy in a standardized manner, which allows for cross-industry comparisons. The monitored 21 indicators are qualitative and fall into three broad categories: (1) commercialisation, (2) tariff reform, and (3) regulatory and institutional development. The aggregated index calculated on the basis of indicators presenting the status of the reforms in each sector at a given period.

Following this foreword, a short summary will outline the major developments within selected sectors of the infrastructure. The second section describes the perspectives of Belarus’ energy sector in the new Eastern Partnership program of the EU. A general analysis of the Belarusian infrastructure policies is presented in the third section. This detailed review of the reforms in each of the five sectors includes not only ex-post analysis, but also an outline of the major challenges and prospects for future sustainable development. A description of the reform progress in each infrastructure sector supplements the numerical evaluation and provides a broader view of the situation. Appendices summarize the evaluation in tabular form and provide methodological explanations and detailed comments for each indicator.

* See www.ier.kiev.ua.
1. Summary

During the year of 2009, like in previous years, infrastructure industries did not see any substantial structural changes but a continuing reluctance to introduce cost based pricing. The changes in regulatory framework in the railway sector did not improve the overall situation, but they can be considered as signs of possible future privatisation deals. The regulatory framework in the road and telecommunications sectors remained unchanged. The situation in the natural gas and electricity sector slightly improved concerning paying off the arrears of previous years but worsened with respect to the cost reflectiveness of tariffs.

The railway sector’s index did not change in 2009, remaining at 1.4 with the railway operator Belarusian Railways (BR) preserving its monopoly status. In 2009, no changes in the ownership, structure, operation and state financing of Belarusian Railways occurred. However, there has been official recognition of the necessity to reorganize Belarusian Railways, transferring social infrastructure to local administrations and privatizing non-core lines of business. Some entities of BR have been listed for privatisation in 2010, which slightly increased the subindex of ownership from 1.3 to 1.4. Besides, there was a significant rise of the cost coverage in the local transportation sector, due to grown tariffs, that led to the “structure of tariffs” subindex improvement from 1.7 to 1.8.

The road sector’s index has not changed either, indicating the absence of any significant reforms or changes in the sector. The passenger and freight carriers benefited from the tax simplification and overall liberalisation intentions. The most negative development observed within the sector was the reduction of the financing for road construction and maintenance which resulted in a deterioration of the quality of the roads in Belarus.

The telecommunications’ index remained at 2.1 in 2009. There were no significant changes in the sector’s regulatory environment, as the government postponed changes to the law “On Telecommunications”. Beltelecom remains the monopolistic provider of the majority of telecommunication services (excluding mobile connections). Some developments in 2009 were primarily associated with an increased competition for customers in the mobile connections segment, because of decreasing returns per subscriber after the international financial crisis. Mobile operators and Beltelecom also made considerable investments in new communication technologies (3G, WiMax, WiFi etc.). Although the profitability of the companies in the telecommunication sector in Belarus is relatively high, compared to other sectors in the economy, it has been gradually decreasing. Cross-subsidisation in the landlines segment and a high level of government intrusion in independent companies’ operations lead to over-rated tariffs for several telecommunication services.

In 2009 there were no considerable structural reforms implemented in the gas sector. As planned, Gazprom acquired another 12.5% of Beltransgaz shares. Household tariffs remained below costs and industrial tariffs. Although improvements in payment discipline continued, consumers’ debts have still not been fully repaid. These changes, however, had not impact on the IPM reform index in gas sector in 2009, remaining at a level of 2.0.

No significant changes were implemented in the electricity sector in 2009. Despite still low natural gas prices and increasing tariffs (in local currency) the cash-flow of Belenergo remained insufficient to finance necessary investments. Cross-subsidisation continued to be an important issue. In general, due to lack of essential changes, the index remained at the level of previous years: 1.7.
Figure 1:
IPM Research Center’s infrastructure reform indices for Belarus

Source: Own calculations.
2. Eastern Partnership: Prospects for Intensifying the Belarus – EU Relations in the Energy Sector?¹

2.1. Introduction

The Eastern Partnership is a multilateral policy framework for the relations between the EU, its eastern neighbours (Ukraine, Belarus, Moldova) and the Caucasus countries (Georgia, Azerbaijan, and Armenia). It is intended “to create the necessary conditions to accelerate political association and further economic integration between the European Union and interested partner countries”.²

The Eastern Partnership emerged from the European Neighbourhood Policy that formed the framework for the EU external policy towards most of its neighbouring countries since 2004. While the Polish-Swedish initiative from spring 2008 for a special eastern dimension of the European Neighbourhood Policy faced some initial reluctance in Brussels; the Russian-Georgian conflict in summer 2008 changed the political climate in favour of a regional policy. Consequently, the European Commission presented a far reaching document on Eastern Partnership, which also found a favourable response from the European Council in December. The Czech EU Presidency took the project forward organizing an Eastern Summit of the EU and the six partner countries in Prague in May 2009. There, the Eastern Partnership was officially inaugurated.

Belarus has expressed high hopes associated with its partnership. Strong media echo in Belarus and repeated optimistic statements by Belarusian politicians indicated that Belarus attach high importance to this new development in the Belarus-EU relations. This positive Belarusian stance towards the Eastern Partnership could be attributed to different political and economic factors.

In particular, Belarus considers it advantageous to participate in EU cooperation programmes targeted on its Eastern neighbours, from a large part of which it has been excluded in the past. While, for some countries, such as Ukraine, the Eastern Partnership might just be a different label for the already close cooperation, for Belarus the Eastern Partnership could imply a completely new dimension of collaboration. Even though Belarus was an official member of the European Neighbourhood Policy (ENP), it was excluded from the Partnership and Cooperation Agreements and the linked ENP Action Plans due to disagreement over common values (e.g. democracy and human rights). Thus, Belarus hopes that the Eastern Partnership will add further momentum to the currently observable relaxation of the EU-Belarus relations. This easing of tension was indicated by the visit of Belarusian foreign minister, Syarhei Martynau, to Brussels, EU high commissioner for foreign and security policy affairs, Javier Solana, to Minsk and External Relations Commissioner Benita Ferrero-Waldner to Minsk.³ Whether, and under which conditions this hope will materialize is a political question that is beyond the scope of this study.⁴ We will also not treat the strategic political dimension of the Eastern Partnership (relations of the EU and Belarus with Russia⁵, recognition of South Ossetia and Abkhazia, EU membership perspective of the Eastern

² EC (2009a).
³ EIU (2009).
⁴ EC (2008).
⁵ The reluctance of Russia to dispense a USD 500 m credit to Belarus (and other economy related disputes) might have, for example, motivated the Belarus administration to demonstrate to their “strategic partner” that they have alternative foreign policy options.
Partnership countries, relation between Eastern Partnership and Union for the Mediterrean etc.) that are widely discussed elsewhere.6

The focus of this contribution is the energy policy section in the Eastern Partnership. Energy is an crucial component in the past, present and future cooperation between the EU and Belarus. For the EU member states, Belarus is an important energy transit country.7 For Belarus the EU could be a principal investor in energy infrastructure. In the somewhat comparable, though much bigger Ukraine, companies, countries and international financial organisations from the EU invested/lend billions of Euros in transmission lines, power plants and pipelines. A similar cooperation could be of high value for Belarus as it might provide external financial resources that help to renew the largely worn out energy infrastructure, stabilize the crisis-affected macroeconomic situation and restructure the inefficient energy sector.

Therefore we first want to analyze in which aspects the Eastern Partnership goes beyond existing policies. Second, we want to line out the energy related EU programmes in which Belarus is participating and what could be expected from the Eastern Partnership. Based on this analysis we will describe how Belarus could increase the benefits from this cooperation.

2.2. What is “new” in the Eastern Partnership

In this section the bilateral and multilateral cooperation programmes between the EU and Belarus are described. Based on a brief introduction of previous and existing programmes the “new” features of the Eastern Partnership are presented.

The Eastern Partnership is not the first EU policy programme towards a closer cooperation with Belarus. Until 31 December 2006, EU assistance to the countries of the European Neighbourhood Policy was provided under various geographical programmes including TACIS8 for EUs eastern neighbours (including Belarus) and Russia. For the budgetary period 2000–2006, the funds available were approximately EUR 3.1 bn for TACIS, as well as approximately EUR 500 m in European Investment Bank lending for the TACIS beneficiary region.

From 1 January 2007 onwards, various programmes have been replaced by the European Neighbourhood and Partnership Instrument (ENPI). The main focus is on country programmes that support the partners’ countries implementation of their own political, governance, economic and social reform programmes. The ENPI is responsible for both the southern and the eastern neighbours. For the current budgetary period (2007–2013), approximately EUR 12 bn in EU funding are available to support these partners’ reforms. According to the preliminary draft of the general EU budget for 2010 (see Figure 2) a large fraction of ENPI funds is dedicated to the southern neighbours. The budget lines also relevant for the cooperation between the EU and Belarus are: ”Political governance reform – eastern neighbours”, ”sustainable development – eastern neighbours”, ”projects in eastern neighbours”, ”cross-border cooperation”, ”regional cooperation among eastern neighbours” and

7 In its Second Strategic Energy Review the EU commission postulates that "A strategy on Belarus should be developed, taking account of its importance as a neighbour and transit country". Second Strategic Energy Review, 13.11.2008, COM (2008) 781 final.
8 TACIS stands for Technical Assistance to the Commonwealth of Independent States. The TACIS Programme provided grant-financed technical assistance to 12 countries to “support their transition to democratic market-oriented economies”. In the energy sector various national programmes were financed by TACIS: e.g., “Support to the Ministry of Energy Armenia”, ”Coal sector policy support Ukraine”. In addition, multilateral programmes like the ”INO Gates Programme” and the ”Nuclear safety programme” were financed from the TACIS budget.
“Erasmus Mundus”. This EUR 400 m (of the total EUR 1.7 bn) for 2010 will have to be shared with at least five other countries, some of which are most probably higher on EU’s priority list.

**Figure 2:**
ENPI funding for 2010

<table>
<thead>
<tr>
<th>Category</th>
<th>ENPI in EUR million</th>
</tr>
</thead>
<tbody>
<tr>
<td>All projects</td>
<td>473.1</td>
</tr>
<tr>
<td>Projects</td>
<td>382</td>
</tr>
<tr>
<td>Measures for the settlement of Georgia internal conflicts</td>
<td>50</td>
</tr>
<tr>
<td>Support to the Palestinian Authorities and the peace process</td>
<td>67.5</td>
</tr>
<tr>
<td>Political governance reforms — eastern neighbours</td>
<td>26</td>
</tr>
<tr>
<td>Political governance reforms — southern neighbours</td>
<td>42</td>
</tr>
<tr>
<td>Sustainable development — eastern neighbours</td>
<td>102.5</td>
</tr>
<tr>
<td>Sustainable development — southern neighbours</td>
<td>113</td>
</tr>
<tr>
<td>Cross-border cooperation (CBC)</td>
<td>91.5</td>
</tr>
<tr>
<td>Cross-border cooperation (CBC)</td>
<td>36.8</td>
</tr>
<tr>
<td>Euro-Med</td>
<td>89</td>
</tr>
<tr>
<td>Regional cooperation among eastern neighbours</td>
<td>38</td>
</tr>
<tr>
<td>Tempus — 50 cooperation projects</td>
<td>25.4</td>
</tr>
<tr>
<td>Erasmus Mundus external cooperation window (EMECW) — 3,520 scholarships</td>
<td>25.8</td>
</tr>
<tr>
<td>Neighbourhood investment facility (NIF) — 15 approved projects</td>
<td>15.5</td>
</tr>
<tr>
<td>Others including Technical Assistance Information Exchange Programme (TAIEX) — 300 organised events</td>
<td>50</td>
</tr>
</tbody>
</table>

**Source:** Draft of EU Budget for 2010.

The ENPI website lists 18 support programmes in which Belarus participates whereby some are significantly better funded then others. In the context of ENPI (and former TACIS), six important multilateral programmes could be highlighted:

- Cross-Border Cooperation (CBC): a large fraction of ENPI funds is spent on cross-border cooperation of the EU and the partner countries to enhance the territorial cohesion. For the Latvia-Lithuania-Belarus Programme EUR 42 m are foreseen in 2007–2013 and for the Poland–Belarus–Ukraine Programme EUR 186 m are planned.
- Technical Assistance and Information Exchange (TAIEX): is an EU programme to organize workshops and short-term visits of EU and member states experts to improve the administrative capacities in the partner countries. In 2008 Belarus significantly reduced its participation in the corresponding programme (2007: 309; 2008: 79 participants).

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9 On http://www.enpi-info.eu/list_projects_east.php?country=58 [last visit: 1 October 2009] one can find:
1. Air Quality Governance in the ENPI East Partner Countries;
2. CBC - Cross-border cooperation;
3. EAST-INVEST - Support to SME Sector in ENP Eastern Partner Countries;
4. Eastern Partnership Culture Programme – Part I;
5. Erasmus Mundus II – Action 2 Partnerships;
6. FLEG - Improving Forest Law Enforcement and Governance;
7. INOGATE;
8-11. Multi-country cooperation instruments (East): NIF, TWINNING, TAIEX, SIGMA;
12. Prevention of Drug Abuse and Fight against Drug Trafficking - BUMAD 3;
13. Regional Information & Communication Programme;
14. SKPI - Support to Kyoto Protocol Implementation;
15. TEMPUS IV for higher education;
16. The EU Water Initiative (EUWI) – Eastern Component;
17. TRACECA;
18. Water Governance in Western EECCA Countries.
- Twinning: is a long-term expert delegation programme. EU and Member States’ administration staff is sent to partner countries public services to assist in capacity building. Currently, Belarus does not participate, inter alia because Belarus law forbids officials to work together with officials from a foreign state.  

- Neighbourhood Investment Facility (NIF): is a fund to support international financial institutions (such as EBRD and EIB) lending in the 16 ENP partner countries. Large scale lending by EIB and EBRD has been slightly topped up (0–5% contribution) from the EUR 700 m seven years budget of the NIF. Belarus did so far not profit from NIF support.

- Governance Facility: additional support (EUR 50 m annually) to the partner country that has made most progress in implementing the governance priorities agreed in their Action Plans. Belarus did so far not profit from a Governance Facility.

- Inogate: is an international energy co-operation programme that aims to stimulate the technical and legal convergence of the national energy sectors by facilitating IFI investment in energy transportation infrastructure and providing technical, financial, legal and environmental expertise. So far, Belarus only participates in some smaller “standard harmonisation” projects.

While countries like Ukraine or Georgia were in the focus of the mentioned programmes for years, Belarus was for political reasons so far largely excluded from EU support. As for example only countries that have signed Partnership and Cooperation Agreements have ENP Action Plans, Belarus was in general not eligible to projects in the frame of the Neighbourhood Investment Facility (NIF) or money from the Governance Facility.

Direct bilateral programmes in the framework of the ENPI are laid out in the Country Strategy Paper 2007–2013 and National Indicative Programme 2007–2010. The National Indicative Programme identifies two priority areas of assistance to Belarus: “Social and Economic Development” and “Democratic Development and Good Governance”. Based on the National Indicative Programme concrete Annual Action Programmes are developed. Those quite specific annual ENPI Action Programmes in which Belarus participates are not to be confused with the more strategic three year ENP Action Plans from which Belarus was so far banned. The Action Programme 2007 relates to the energy sector, the Action Programme 2008 deals with environmental issues and the Action Programme for 2009 is concerned with food safety. The last programme has been financed by the EU with EUR 10 m. As indicated in Table 1 the corresponding budget allocation for 2007–2010 is negligible.

Table 1:
Distribution of ENPI budget line in 2007 and country programmes indicative funding 2007–2010 in EUR m

<table>
<thead>
<tr>
<th></th>
<th>Armenia</th>
<th>Azerbaijan</th>
<th>Belarus</th>
<th>Georgia</th>
<th>Moldova</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007–2010</td>
<td>98</td>
<td>92</td>
<td>20</td>
<td>120</td>
<td>210</td>
<td>494</td>
</tr>
</tbody>
</table>

Source: ENPI.

Conclusion: The described examples indicate that Belarus has already been involved in numerous EU programmes before 2009. For lack of own interest (TAIEX), absent legal basis in Belarus (Twinning) and EU’s reluctance to engage in large bilateral investment (NIF) most of the programmes are either narrowly focused (FLEG), sparsely funded (Action Programmes) and/or part of large multilateral projects (CBC).

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10 In 2007-2013 the budget for Twinning for all south and east ENPI countries is Euro 12 bn.
11 Funds allocated to individual country programmes depend on their needs and absorption capacity as well as their implementation of agreed reforms. [http://www.enpi-info.eu/mainmed.php?id=340&id_type=2].
Based on the brief description of the *status quo ante* the new cooperation programmes in the framework of the Eastern Partnership should be introduced. In principle there will be biannual meetings of Heads of States or Governments involving the 27 EU Member States and the partner countries of the Eastern Partnership. Annual meetings of Ministers of Foreign Affairs would review progress and provide more detailed political guidance.

Apart of this general declaration of intention to more closely coordinate on the highest political level\(^\text{13}\), three new features of the Eastern Partnership that have economic policy implications, could be identified:\(^\text{14}\) “multilateral thematic platforms”, “flagship initiatives” and increased funding.

The **thematic platforms** should provide a framework in which common multilateral challenges can be addressed. This includes seminars to improve the understanding of EU legislation and standards, sharing of experience, and where appropriate development of joint activities. Four policy platforms exist: (1) Democracy, good governance and stability; (2) Economic integration and convergence with EU sectoral policies; (3) Energy security; and (4) Contacts between people.

In each thematic platform senior officials hold regular meetings (twice a year in Brussels). The first meeting round took place in summer 2009.\(^\text{15}\) According to the General Guidelines “each platform will adopt a set of realistic, core objectives that should be updated periodically, with a corresponding work programme, and will review the progress achieved” and can establish expert-level working groups (panels). So far no information on the decided objectives or eventual working groups are made public. Consequently, it remains to be seen, whether this official discussion forum will become successful. Unless the partner countries see no real decision making power with respect to budget allocations it is, however, possible that the partner countries will prefer to employ their scarce administrative resources elsewhere, i.e., withdraw their best experts from the platforms.

A promising approach to quickly demonstrate the capacity of EU programmes and build capacity in the partner countries administration are the **flagship initiatives**. In the Prague declaration five areas for “flagships” have been defined: (1) Integrated Border Management Programme, (2) SME Facility, (3) Regional electricity markets, improved energy

\(^{13}\) Currently, the most largely covered initiative in the Eastern Partnership is the Civil Society Forum.


1. Voluntary new association agreements including free trade agreements;
2. EU funded programmes to improve partners’ administrative absorption capacity;
3. “Mobility and security pacts”, allowing for easier legitimate travel to the EU;
4. EU wants to study the possibilities for increased labour mobility;
5. Enhance energy security in the partner countries;
6. Multilateral platforms;
7. Enhanced cooperation on environment and climate issues;
8. Increased people-to-people contacts and greater involvement of civil society;
9. Additional financial support of EUR 350 m for the period till 2013;
10. Flagship initiatives.

\(^{15}\) “According to the Joint Declaration of the Prague Eastern Partnership Summit, the multilateral framework of the Eastern Partnership will provide for cooperation activities and open and free dialogue serving the objectives of the Partnership. It will operate on a basis of joint decisions of the European Union and the partner countries. It will provide a forum to share information and experience on the partner countries’ steps towards transition, reform and modernisation and give the EU an additional instrument to accompany these processes. It will facilitate the development of common positions and joint activities. The multilateral framework is aimed at fostering links among partner countries themselves and will be a forum for discussion on further developments of the Eastern Partnership.” Source: Eastern Partnership Multilateral Platforms - General Guidelines and Rules of Procedure, Brussels, 5th June 2009.
efficiency and increased use of renewable energy sources, (4) Southern energy corridor, (5) Prevention of, preparedness for, and response to natural and man-made disasters.

By September 2009 two flagships (1 and 5) were prepared to be launched in the end of 2009. To give a rough idea on the financial dimension, in the first phase EUR 6 m are aimed for flagship 5 while significantly more should be spend in the second phase.\(^{16}\) Overall the Commission proposals for flagships 2, 3 and 5 foresee mainly technical assistance to improve coordination but seem to allow/encourage financial assistance from international financial institutions.

The third highlight of the Eastern Partnership is the additional financial support of EUR 350 m for 2010–2013 (2010: EUR 25 m; 2011: EUR 53 m; 2012: EUR 113 m; 2013: EUR 159 m). However, “the Commission would need Council approval for allocations to Eastern partner countries on an annual basis, which would enable other claims on the margins and other external relations priorities to be considered”.\(^{17}\) Consequently, in extreme situations the Eastern Partnership funding might not be fully assured.

Moreover EUR 250 m that was already allocated to the ENP regional east programme will be reallocated to initiatives relevant for the implementation of the Eastern Partnership, bringing the total for implementing this new initiative to EUR 600 m.\(^{18}\)

According to SIPU (2009) the Commission proposes that the new funds should be used to finance the multilateral elements of the Eastern Partnership. Remaining funds should be divided roughly equally between the economic and social development objective (~ EUR 75 m) and the multilateral dimension (~ EUR 75 m). The multilateral dimension will presumably cover the work within the thematic platforms and certain of the flagship projects. Obviously this level of finance is insufficient on its own to fund the envisaged major flagship projects.

The reason for this lack of funding is that the Eastern Partnership was decided in the middle of the budget period 2007–2013. Consequently, the resources had to be found within the existing financial framework and were therefore fairly constrained. However, the described large number of projects acknowledged by the EU but not properly funded could also be interpreted as a promise for the next budget period (2014–2020). SIPU estimates that while the total EU-Budget will not increase markedly rescheduling of financing lines might, conditional on political will, allow an Eastern Partnership funding between EUR 1.5 bn and EUR 3 bn in 2013 prices. Such an adjustment of budget priorities will, however, probably meet the opposition from southern member states and accession critical countries. Therefore, good progress in the partner countries might help to find arguments for such an increase in Eastern Partnership funding. Another source of finance probably envisaged by the EU was co-financing from interested (central European) member states and international financial institutions.

Apart of the new instruments and the improved finance for programmes in the eastern neighbourhood, the most important point for Belarus in the Eastern Partnership might be the fact that is allowed to participate. The decision to make Belarus a full member of the Eastern Partnership was not uncontested but followed an obvious relaxation in the EU-Belarus relations. Those were indicated by a series of high ranking visits in 2009: Belarusian foreign minister, Syarhei Martynau to Brussels, EU high commissioner for foreign and

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\(^{16}\) Source: Presentation of DG RELEX: “Prevention of, preparedness for, and response to natural and man-made disasters An Eastern partnership Flagship initiative”.

\(^{17}\) UK House of Commons European Scrutiny Committee. A part of the Eastern Partnership budget comes from a margin under heading 4 of the ENP budget, thought as a reserve in crisis situations in the neighbourhood countries, e.g. in Palestine.

\(^{18}\) “Available funding was reduced to this level during negotiations within the Commission” (SIPU).
security policy affairs, Javier Solana to Minsk and External Relations Commissioner Benita Ferrero-Waldner to Minsk.

Despite its full member status in the Eastern Partnership, Belarus participation in bilateral projects remains conditioned on “the overall development of EU - Belarus relations”. This implies that decisions on concrete projects are subject to a case-by-case decision by the EU. On the one hand it is probable that the criteria for funding Belarusian proposals might be stricter than those for other countries; on the other hand the case-by-case approach does not categorically preclude any type of project.

Conclusion: the Eastern Partnership does not leave the path of the European Neighbourhood Policy but slightly widened its scope. While especially the flagship projects indicate a significant increase in the scale of European engagement in the region, the funding in the current EU budget period (2007–2013) is rather modest. This could be interpreted as a promise for the coming EU-budget (2014–2020) to adjust the means to the aims. For Belarus, being in the Eastern Partnership is potentially more important than for other partner countries. While Georgia, Ukraine and Moldova were already on track towards a closer integration in the European market Belarus would have risked being uncoupled from this regional dynamics. Concerning funding, however, the Eastern Partnership is also for Belarus more a promise than a reality as bilateral investments remain restraint to political conditions.

2.3. EU – Belarus cooperation in the energy sector

In the first part of this section existing programmes of cooperation between the EU and Belarus in the energy sector are presented. The new instruments under the Eastern Partnership are discussed in the second part.

Under National Indicative Programme 2007–2010, energy sector issues are considered as a part of the first priority area (“social and economic development”). Consequently, energy was the subject of the 2007 ENPI Annual Action Programme. In addition, climate change and electricity network issues have also been part of the TACIS regional action programme 2006. Including multilateral programmes, we were able to identify five ongoing EU projects in the field of energy that involve Belarus:

− Support to the Implementation of a Comprehensive Energy Policy for the Republic of Belarus: This ongoing study funded by EUR 5 m is carried out under the ENPI Annual Action Plan 2007.
− Safety and security of main gas transit infrastructure in Eastern Europe and the Caucasus: This TACIS project that is implemented by INOGATE involves six countries. The total funding of EUR 1 m should be used to study the losses in the gas network and coordinate the corresponding policies. Based on the studies projects are to be promoted to the IFIs for financial support.
− Harmonisation of technical standards and practices in the oil and gas sector in Europe and Northern Caucasus: This multilateral TACIS project has a total budget of EUR 2.8 m.
− Harmonisation of electricity standards: This multilateral TACIS project (concerns INOGATE countries) has a total budget of EUR 1.5 m.

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19 Fride (2009).

20 SIPU (2009): “The proposal on bilateral relations in the Eastern Partnership is fundamentally to extend the offer which has already been made to Ukraine to the other five countries of the region. This means that, when they are ready, the other five countries will be offered the chance to negotiate an Association Agreement with the European Union.”
Support to the extension of the Covenant of Mayors to NIS countries: The objective of this project under consideration is to encourage and support local authorities to achieve a more sustainable local energy policy.

Besides this rather limited EU programmes, bilateral technical assistance agencies and international financial institutions are also active in the Belarus energy sector.

International Financial Cooperation (IFC): The “Belarus Energy Efficiency Survey Project” is the only energy sector project of IFC in Belarus. The main goal of this ongoing technical advisory project is to assess the current market for energy efficiency (EE) financing in Belarus.

UN Development Programme/Global Environment Facility (UNDP/GEF): The GEF is the second largest foreign donor in the Belarus energy sector. So far two major projects are/were conducted: (1) Between 2003 and 2007 the “Biomass energy for heating and hot water supply” project was a USD 9 m (USD 3 m by GEF) initiative to promote biomass usage in Belarus. (2) A second project running from 2006 to 2010 “Removing barriers to energy efficiency improvements in the State sector in Belarus” supports local authorities and state enterprises in identifying energy efficiency opportunities, particularly in the distributed heating and combined heat and power sector. The total projects budget is USD 9 m (USD 1.6 m by GEF).

World Bank: The World Bank has been the most active donor in the energy sector in Belarus. In spring 2009 the Board of Executive Directors of the World Bank approved a USD 125 m loan to the Republic of Belarus to support a USD 193 m Energy Efficiency Project aimed at improving energy efficiency in heat and power generation in selected towns in Belarus. This is the largest World Bank project in Belarus. In addition World Bank also conducted the “Social Sector Energy Retrofitting Project” (USD 23 m) and the related “Climate Change Pilot Project” (USD 1 m).

German Technical Cooperation Agency (GTZ): The GTZ conducted projects on sustainable restructuring of energy systems in buildings and the promotion of renewable energies.

This incomplete (but indicative) compilation of energy sector projects by international donors indicates that Belarus has until 2008 received only very modest support. Many important international financial institutions, very active in neighbouring countries (e.g., EBRD, KfW) were not involved in the Belarus energy sector. Up to 2008 Belarus attracted less than USD 50 m from all donors (EU, bilateral and IFIs) in the entire energy sector. In the same period Ukraine was able to attract projects for its electricity sector from the World Bank alone, worth USD 877 m. In 2009 the climate apparently changed with the first significant loan to the Belarus energy sector by the World Bank and the discussions within the EBRD to potentially get active in the Belarus energy sector.

In the remainder of this section we thus want to analyse whether the instruments of the Eastern Partnership in the Energy Sector could contribute to the upsurge in donor activity. Being mentioned several times in the relevant documents, energy is as an important component in the Eastern Partnership. Actually, two instruments of the Eastern Partnership practically deal with the energy sector: the third platform and the third flagship. Both should be briefly introduced:

The “Energy Security” Platform is a high-level discussion forum in which representatives of the EU Commission (in particular from the Directorate-General for Transport and Energy (DG TREN) and the Directorate-General for External Relations (DG RELEX)) meet with officials from the partner countries. From presentations of DG TREN and the EU’s second strategic energy review one can deduce that the EU is very interested in becoming more active in securing energy supplies from the East (a task certain member states prefer to care for themselves). This translates into three EU core objectives of the Energy Security
Platform: (1) Enhancing framework conditions and solidarity, (2) Support for infrastructure development, interconnection and diversification of supply and (3) Harmonisation of energy policies. For all main objectives, different sub-goals have been defined:

1. **Enhancing framework conditions and solidarity**
   - Development and implementation of mutual energy support and security mechanisms, including early warning mechanisms and joint security actions;
   - Strengthening of energy security contacts and enhancement of energy crisis preparedness by establishing an energy security panel;
   - Development of an Energy Infrastructure Action Plan based on corresponding EU positions.

2. **Support for infrastructure development, interconnection and diversification of supply**
   - Support for the rehabilitation of the gas transit network (for example through international investment conferences);
   - Create a level playing-field for energy transits;
   - Multinational public-private partnerships to the rehabilitation of gas transit networks;
   - Enhancement of political and practical support for the realisation of the Southern energy corridor;
   - Support of the extension of the Odessa-Brody oil pipeline;
   - Mobilisation of additional technical assistance and loans from EIB (and other International Financial Institutions), notably through the NIF (Neighbourhood Investment Facility), e.g. to increase partners’ gas, oil and oil products storage capacities, hydrocarbon processing and transportation infrastructures, and to upgrade electricity interconnections;
   - Support for the acceleration of Moldova’s and Ukraine’s accession to the UCTE (Union for the Co-ordination of the Transmission of Electricity) network;
   - Promotion of the development of Liquefied Natural Gas (LNG) facilities at Black Sea.

3. **Harmonisation of energy policies**
   - Organisation of seminars, workshops and training sessions on the EU energy acquis;
   - Twinning and networking between EU and partner countries energy institutions;
   - Development of an energy dialogue with participation of EU and partners’ industry.

While certain of the EU objectives are not shared by all EU member states, others are undisputed and could provide mutually beneficial fields for cooperation between the EU and the Eastern partners (see section 4). However, some of the EU objectives concerning energy transit are not in the interest of all partner countries. Thus, it is for example unclear what role Belarus would play in a platform discussion about the support to Ukraine’s UECT accession or the Southern Energy Corridor as those initiatives are clearly against the interest of the Belarus energy sector. The same holds true on Ukraine’s incentives to strengthen the natural gas transit through Belarus.

Consequently, it is not clear whether this EU “wish-list” could become the basis for a fruitful multilateral discussion. Thus, the success of the platform depends both, on the willingness of all partners to collaborate, the possibility to focus on common objectives and the ability to find tailor-made solutions for each partner country that fit in a common framework.
The “Regional electricity markets, improved energy efficiency and increased use of renewable energy sources” flagship contains energy related fields for setting up a visible joint project. According to DG TREN the objectives are to either support the extension of interconnections and/or to improve energy efficiency and expand use of renewable resources. DG RELEX identifies four main elements for the energy flagship:

- Technical assistance for studies/expertises in matters of regulatory and policy framework, capacity building and occasional (small scale) pilot project financing;
- Feasibility studies and other activities to improve access to available financing sources for investment in the energy sector;
- Support the establishment and implementation of “sustainable energy action plans” by cities having signed up for the “Covenant of Mayors”;
- Promote the participation of Eastern Partnership countries in the Intelligent Energy Europe Programme.

As indicated in Section 2 the drawback of the described high-aiming objectives of the Eastern Partnership is their funding. At best, the Belarus energy sector might expect some EUR 20 m annually (potentially less as equally distributing EUR 600 m over four years, six countries and five policy fields is EUR 5 m per country, year and subject and assuming that Belarus could only benefit from the EUR 150 m for the flagship and the platform the annual contribution of the Eastern Partnership might be around EUR 1 m for Belarus energy issues). This is not the appropriate dimension for effective financial assistance in the energy sector. Consequently, the Eastern Partnership funding might only act as a catalyst helping to provide the framework conditions for loans from international financial institutions and bilateral agencies.

At first glance, the highly human capital intensive multilateral expert rounds installed via the Eastern Partnership might thus not be very attractive to Belarus policy makers in particular as they do not guarantee a direct payoff in terms of EU financial assistance. Such thinking would, however, be short-sighted. We see three major motives why Belarus should become seriously engaged in the Eastern Partnership: (1) to increase the acceptability of any kind of international cooperation with Belarus, (2) to increase the ability of Belarus to attract and conduct major projects and (3) to increase the chances of a growing EU budget allocation towards technical and financial assistance to Belarus.

(1) Increasing acceptability of any kind of international cooperation with Belarus

By demonstrating the willingness and ability to successfully conduct smaller projects in the framework of the Eastern Partnership Belarus sends a strong signal to the EU and other western donors. Already in the short and mid-term when the EBRD decides about its country strategy (the EU and the member states are in the executive board of the EBRD), the EU prepares its 2014–2020 budget and other IFIs (e.g. KfW) reconsider their level of activity in Belarus, the preparedness of Belarus to meet EU project standards and follow corresponding procedures will be an important argument.

(2) Increasing the ability of Belarus to attract and conduct major projects

Smaller multilateral projects and expert talks are a good way to familiarise Belarus experts and officials with the functioning of EU project procedures. Furthermore, increased direct contact will help Belarus officials to learn the objectives and constraints of EU-politics, which will be highly beneficial when drafting future proposals for major projects.

(3) Increasing the chances of a growing EU budget allocation towards technical and financial assistance to Belarus.

The decisions on EU funding are not only made based on the potential outcomes but they are also related to past successes/failures. Consequently, the EU monitors closely the de-
velopment of past/ongoing projects when deciding about new ones.\textsuperscript{22} Funding for the Eastern Partnership from 2011 to 2013 is for example linked to the mid-term review of the European Neighbourhood and Partnership Instrument which is due in March 2010.\textsuperscript{23} More importantly, the negotiations on the next EU budget for 2014–2020 will probably begin as soon as the new Commission is in place (end of 2009). There, important decisions on the scale of funding for the Eastern Partnership and other instruments of technical and financial assistance will have to be made. In this context it will be essential for Belarus, as for other countries, to play an active role in this budget development process (i.e., lobby for Belarus interest). To do so, the corresponding (formal and informal) procedures need to be known, the pivotal institutions and persons need to be identified and good contacts should be established. Thus, Eastern Partnership provides invaluable insight into the complex Brussels cosmos.

The means by which Belarus could increase its benefits from cooperation are outlined in the next section.

2.4. Increasing the benefits from cooperation

Belarus has the political will, the appropriate projects and the technical capacity to attract more energy sector projects for the mutual benefit of Eastern Partners, the EU and Belarus. Nevertheless it could not be taken for granted that the Eastern Partnership will bring a breakthrough with respect to foreign financial and technical assistance to the energy sector. One important reason is that Belarus’ has no sufficiently professionalized system of assistance acquisition. To rectify this situation we suggest that Belarus strengthen its abilities to successfully interact with potential donors and deliver strong proposal (Institutional Component), and that a limited number of highly appropriate, internally coordinated, well-founded projects are identified (Project Identification Component).

Institutional Component

Attracting technical and financial assistance is like attracting investments or selling goods not only depending on the technical characteristics of the product. Consequently, also assistance projects require appropriate marketing. General recommendations are building trust-relationships with the potential “buyers” (i.e., EU officials) to reduce transaction cost or transparently providing the information required by the buyer and thereby reduce costly frictions from information asymmetries. In more specific terms the suggestion we consider most important is to employ specialised experts. In the short term this would require the collaboration with expensive, though cost-effective, external experts. In the long term educating internal experts for the project acquisition processes is essential. Taking into account the potential resources at stake, those should form a competitively paid team of aptly educated and English speaking experts. In its “Action fiche for Belarus 2009” the EU acknowledges frankly: “the vast majority of Belarusian institutions have limited if no knowledge of the requirements for successful implementation of EC assistance programmes has been attributed to the political isolation the country has been in with regards to the EU. The

\textsuperscript{21} “Finalisation of a European Commission- Belarus declaration on energy, as a basis for further development of energy cooperation. This cooperation could cover, inter alia, hydrocarbon transit and energy sector reforms”. Eastern Partnership, 3.12.2008, COM (2008) 823 final.

\textsuperscript{22} “The Eastern Partnership aims to strengthen energy security through cooperation with regard to long-term stable and secure energy supply and transit, including through better regulation, energy efficiency and more use of renewable energy sources. Provisions on energy interdependence could be included in the new Association Agreements or other bilateral arrangements between the EU and the partner countries. Energy cooperation should take into account the EU’s Second Strategic Energy Review and each partner country’s energy policy.” (Prague Declaration).

\textsuperscript{23} This is efficient in economic terms as trust is an appropriate tool to reduce transaction cost.

\textsuperscript{23} UK House of Commons European Scrutiny Committee.
intensified technical cooperation between the European Commission and Belarus has given rise to the need to strengthen the institutions responsible for the implementation of sector programmes of mutual interest – and specifically the ones targeted by the ENP Annual Action Programmes.” Consequently the EU has explicitly entered in the food safety programme the objective of a “Strengthened National Coordination Unit to effectively coordinate the implementation of the programmes under ENPI and to deal with identification and programming issues.”

Currently, the installation of the National Coordinating Unit (NCU) is supported by the EU with a EUR 600,000 project. The objective of this project is to support the capacity of Belarus to make the best use of EC assistance. The existing efforts to build up a powerful competence centre as a joint resource for all Ministries should not only be pursued but need to be strengthened financially, administratively and human capital wise.

In addition to this explicit capacity building the possibilities of an effective learning-on-the-job should be enhanced. That is, the same group of people should be involved in as many proposals as possible.

**Project Identification Component**

For attracting investments it is not sufficient to just present a large list of potential projects without clear priorities originally designed to be internally financed. Suggesting a limited number of highly appropriate internally coordinated projects that provide clear value added to all partners is much more promising. Thereby, it is important to draft the proposal from the “buyer” perspective. That is, more emphasis should be devoted to highlight the advantages for the EU than on presenting why the project fits well into Belarus plans. This is crucial because the EU is no monolith organisation but an institution with diverging interests. Thus, providing good arguments to those EU units/officials who support Belarus efforts is essential so that they have the tools to convince their more reluctant colleagues.

Projects of mutual interest were already identified by the EU (especially DG TREN appears to be rather active). In the field of technical cooperation security of supply agreements on natural gas, oil and electricity seem to be high on the agenda. This might for example consist of formalized mutual help in case of disruptions. In case of uneven risks and benefits such cooperation agreement might well contain a financial component. It is for example thinkable that the usage of security of supply infrastructure (e.g., pipelines and storage facilities) in one country is allowed to another country under certain circumstances. In case of a natural gas supply disruption Belarus might for example allow Poland to use gas from Belarus’ natural gas storage facilities. Such a formalized “insurance” contract might well be coupled to the annual payment of an insurance payment. Concerning financial assistance, joint infrastructure projects to increase the technical security of supply come to mind.

Enhancing the reliability of natural gas, oil and electricity infrastructure is in the shared interest of the energy importing EU and its energy transiting neighbours. Concrete proposals in the framework of a multilateral proposal have of course to be cross checked with respect to potentially competing interests among the partner countries (e.g., it would be natural to assume a competition between Belarus and Ukraine for natural gas transit volumes).

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24 Action fiche for Belarus 2009 – support to quality infrastructure in Belarus – food safety.
25 Within the framework of the TACIS Action Programme 2005-2006 provision was made to support the National Coordination Unit in Belarus. The contract was signed on 05 May 2008 and the project activities in Belarus started on 12 May 2008.
26 The project Terms of Reference specify four specific objectives:
   1. Promote the long-term self-sustainability of the NCU.
   2. Assist the Belarus government to participate in the Neighbourhood Policy Instruments.
   3. Strengthen the capacity in relation to EU external assistance programmes.
   4. Increase public awareness of EC assistance programmes.
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Belarus’ economic system can be characterized as a government-controlled economy with private ownership in some sectors. The infrastructure sector is almost entirely in state ownership with only little, strongly regulated, private participation in telecommunication (mobile) and transportation (street transport).

Up until now, the Belarusian economy did not suffer much from the economic crisis. IMF loans helped to maintain currency reserves and the government again postponed privatisation due to underrated asset prices during the crisis. Although there have been some reforms in economic policy (concerning improving business climate), Belarus has seen almost no reforms in the infrastructure sector. Instead, tariffs in some sectors (e.g. electricity) have been kept at artificially low levels to contain inflation. Extensively discussed ownership reforms in infrastructure industries have still not been implemented. However, there are plans to start corporatisation and privatisation (mainly in railways and telecommunications). Nevertheless, the lack of competition, overregulation, state dominance, numerous distortions, weak incentives and insufficient investment still remain main characteristics of the sectors.

The corresponding lack of proper incentives and foreign investments partly explains the decreasing performance of the infrastructure industry. Especially the lack of investments exacerbates the current difficulties of the Belarusian economy, namely negative trade and payment balances. Nevertheless, market oriented structural reforms in industries and infrastructure are no priority for the government. Despite a presumed need of foreign investment in 2010, we do not expect further restructuring and privatisation to be realized in 2010 due to the time-consuming governmental procedures of discussion and approvals.

Reforms in the transport sector remained inconsecutive. No attempts were made to reform Belarusian Railways, a monopolistic railway operator and service provider, or public street transportation companies. However, there are ongoing discussions on the necessity to reorganize Belarusian Railways into a state-owned joint-stock company and separate the social infrastructure. Besides, some entities of Belarusian Railways are set to be privatized in 2010. Cross-subsidisation between local and international freights was reduced in 2009, while cross-subsidies between passenger and freight transportation increased. Until now, the automobile transportation is more open to competition compared to the railway transportation, though state-owned providers of road transportation services generally receive more favourable treatment than their private competitors.

Although the government takes some steps to bring to telecommunication sector closer towards international standards (WTO in particular) by, for example, selling shares of mobile operators to foreign owners in previous years, real competition in the sector remains underdeveloped. Long awaited changes to the legislation regulating the telecommunication market, were not realized. Thus, there are no clear plans for real liberalisation and privatisation of the sector including the national operator Beltelecom. Thus, the monopolistic nature of the sector will persist.

The energy sector (both natural gas and electricity) does not show noticeable progress in implementing market reforms. Current consumption of imported natural gas and electricity was paid on time and in cash. External overdue debts were paid off and current debts for energy consumption were significantly reduced. The practice of tariff setting keeping non-market while cross-subsidisation remains. The government keeps household tariffs at artificially low levels. Besides, there is cross subsidisation of heat by electricity. As a result, most industrial consumers face high electricity tariffs which hurt their competitiveness. The generally low end user energy prices affected the financial results of the energy enterprises, thus restraining investment in new equipment and technologies. The government does not see restructuring per se as a mechanism for improving efficiency. It thus does
not seems to be ready yet for comprehensive reforms. Privatisation and the set up of an independent regulatory organ in the sector are not in the discussion.

There are only minor differences between the EBRD and the IPM Research Center indices (Figure 3). Due to a finer scaling used by the IPM Research Center the indices of reforms in railway and electricity sectors are higher than those of EBRD, while reforms in the road sector are slightly lower. Both EBRD and the IPM Research Center experts did not find much progress in implementing reforms in any sector of the Belarusian infrastructure.

**Figure 3:**
Infrastructure reform indices for Belarus

3.1. Railways

3.1.1. Progress in 2009

Belarusian Railways (BR) is a sole operator and provider of transport services in the railway sector. Despite intense discussions on the necessity to reform BR’s business structure nothing significant was done in 2009. Among the discussed reforms were privatisation of the non-core business units of BR (assets that are neither railways nor carriages), transition of social infrastructure from BR to local authorities as well as the creation of a joint venture with Russian Railways. Nowadays, the structure of BR, besides 47 enterprises and 7 plants, includes 38 institutions, among them are healthcare, education and cultural institutions as well as some sport units. As a positive sign one may consider the inclusion of 5 more enterprises of BR (on top of the initial 4) into the list of enterprises to be privatised in 2010. However, there is not much hope that the plan on privatisation will be implemented. Among other developments one should mention the creation of a logistic centre in Brest in the form of a joint venture with the private Czech railways operator OKD Doprava\(^1\) and the development of container transportation, that includes among others the Brest–Kaluga–Brest railway connection (transporting spare parts to plants of Peugeot–Citroen and VW), the ZUBR train (connecting Estonia, Latvia, Belarus) and the Viking train (connecting Lithuania, Belarus, Ukraine).

Despite these efforts the freight traffic of BR dropped by 12.9% in 2009. Most of this decline occurred due to the global economic crisis. Since the first half of 2009 (when the fall was 18.1% yoy) the sector has seen a slight increase of freight transportation volumes. Another negative factor was a reorientation of transport flows from Kazakhstan and Russia to China as well as to ports of the Russian Federation instead of the ports of Baltic countries. As the GDP in Belarus remained almost unchanged in real terms (growth 0.2% yoy) in 2009, it implies that the intensity of freight transportation fell by 12.9%, making 2009 the sixth consecutive year of falling intensity (see Figure 4). The railway transportation is losing its attractiveness compared to the auto transportation and the status quo can only be maintained by improving logistic services in the railway sector.

**Figure 4:**
Railway transportation intensity

![Graph showing railway transportation intensity](image)

Source: own calculations based on data of Belstat.

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\(^1\) The initiative comes from OKD Doprava that owns the terminal in Brest on the basis of which the centre is going to be created.
Tariff policy became the main instrument of reaction to the challenges of the global economic crisis by BR. In 2009, tariffs grew by 58.8% yoy (see Table 2). However, there was a wide range of discounts for more than 80 product categories in internal transportation, especially transported from Kaliningrad. Domestic transportation tariffs were raised by 10% in March and again in June 2009, in order to make domestic transportation profitable and to eliminate cross-subsidies between domestic and international freight. As a result, 92% of the expenditures (around 70% in previous years) were covered by the tariffs in 2009, while it is expected that all expenditures will be covered by the tariffs in 2010. It is quite possible that this target is going to be achieved, as freight tariffs have already grown twice in 2010 by 15% and 5%.

The volume of passenger traffic continued to decline in 2009. It decreased by 9.8% yoy and its intensity by 8.3% (Figure 4). There are numerous factors that caused this decline. Besides the ongoing automobilisation of the country and decreasing mobility of the population, the global financial crisis affected the passenger transportation greatly, as it reduced the number of cross-border trips. Another factor, affecting the volume of international railway passengers is growing tariffs which increased by 25.3% yoy in 2009 exceeding both the consumer and service price index. Whereas the tariffs for suburban and national passenger transportation remained almost unchanged. Tariffs for national passenger transportation grew by 0.3% yoy but fell for suburban transportation by 3.2% which was caused by the new scheme of tariff-setting for these services. At present, ticket prices purely depend on the distance travelled, compared to the number of zones travelled as it was done before. 2009 was the second consecutive year, in which tariffs for national and suburban transportation were not rising. The increase of the general price level leads to mounting losses of BR in the passenger segment, which are partly compensated via increasing cross-subsidisations between passenger and freight transportation. Additionally, growing tariffs for international passenger transportation increase the cross-subsidies of international against domestic passenger transportation.

The global economic crisis hampered the overall conditions for railway operations in 2009. For the first time since 2000 the share of passenger transportation in total railway transportation grew from 14.3% to 14.7% (Figure 5). The traffic density on the other hand fell by 12.4% to 11.6 m units per km, which is still a good level compared to other CEE and CIS countries. Such developments mean a growing need for cross-subsidisation on the one hand and a need to gradually increase the share of passenger transportation in total traffic on the other hand.

### Table 2:
Price indices of railway transportation services, yoy

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>227.5</td>
<td>120.5</td>
<td>119.8</td>
<td>112.7</td>
<td>107.1</td>
<td>113.5</td>
<td>115.5</td>
<td>124.9</td>
<td>158.8</td>
</tr>
<tr>
<td>National</td>
<td>183.7</td>
<td>140.2</td>
<td>132.4</td>
<td>151.5</td>
<td>112.1</td>
<td>117.3</td>
<td>128.6</td>
<td>123.6</td>
<td>125.3</td>
</tr>
<tr>
<td>Suburban</td>
<td>251.4</td>
<td>197.4</td>
<td>141.7</td>
<td>117.0</td>
<td>109.5</td>
<td>111.3</td>
<td>113.3</td>
<td>100.0</td>
<td>100.3</td>
</tr>
<tr>
<td>Consumer price index</td>
<td>269.2</td>
<td>202.9</td>
<td>162.0</td>
<td>134.8</td>
<td>120.0</td>
<td>120.4</td>
<td>117.9</td>
<td>100.0</td>
<td>96.8</td>
</tr>
<tr>
<td>Service price index</td>
<td>161.1</td>
<td>142.6</td>
<td>128.4</td>
<td>118.1</td>
<td>110.3</td>
<td>107.0</td>
<td>108.4</td>
<td>114.8</td>
<td>112.9</td>
</tr>
</tbody>
</table>

Source: Belstat.

2 These conditions can be evaluated by traffic mix proportion of passengers and traffic density. Traffic mix characterizes the share of passenger traffic in total traffic (sum of passenger and freight traffics). Traffic density is a ratio of total traffic per 1km of railroads.

3 For international comparison see Amos, P. (2005). Reform, Commercialisation and Private Sector Participation in Railways in Eastern Europe and Central Asia. The World Bank Group Transport paper #4, p. 2. The highest traffic density is in Russia (19.4 m units per km m units per km), while Belarus holds the second place. The traffic mix ratio in Russia, for instance, is 9% (21% in Ukraine).
hand and higher fixed costs related to maintenance and operation of the railway network on the other. As a result, BR needs timely reforms to sustain the consequences of the global economic crisis, the changing transportation flow patterns and the declining public financing.

3.1.2. Reform agenda

The most discussed problem faced by railways is the abolishment of cross-subsidisation between passenger and freight transportation, which causes losses for BR. This can be achieved by forcing passengers to cover a greater share of costs while providing the most sensitive (to an increase in railway tariffs) part of population with direct income compensation.

Another important reform issue is the abolishment of all non-core activities and split up of core activities into separate lines of business. The process seems to be ready to start, as 9 enterprises under the BR conglomerate are listed to be privatized in 2010. However, for a lack of actual deals, it is quite possible that this part of the reform will remain unaccomplished. Further reforms should thus be carried out in the following steps:

- The government should create a clear regulatory framework by separating the economic activities of the railway sector from its regulation. An independent regulator for this sector would ensure that investment and other decisions are not influenced by the concerted interests of consumers of transportation services or by railway construction companies. Later on it could also regulate access to the market of private carriers and forwarding companies. A transparent tariff setting policy, which would not be influenced by Belarusian Railways, should be the responsibility of the regulator;

- Finally, the core economic activities in this sector should be divided into separate companies. Initially, these companies should be separately incorporated and jointly integrated into a holding structure. Privatisation of the separate companies can occur after a suitable regulatory framework is established.
3.2. Roads

3.2.1. Progress in 2009

The situation in the road sector remained largely unchanged in 2009 compared to the previous year, with shrinking financing of the road infrastructure remaining the most acute and troublesome problem. This process has accelerated since 2007, when the special turnover tax on road usage was abolished. The government did not find a possibility to reallocate funds in the general government budget to meet demand of the road infrastructure, especially in 2009. The economic crisis, the necessity to attract IMF loans and to reduce foreign trade deficit forced government to cut public expenditures by 3% of GDP and to run a general government budget of no more than 0.7% of GDP. As a result the road fund – main source of financing for road programs – accumulated BYR 1974.5 bn or 1.4% of GDP which is 0.9 percentage points less than in 2005, when the fund reached its maximum volume, and 0.1 percentage points less than in 2008. Additional sources of finance for the road sector are expected to be attracted by borrowings from banks and international organisations. For example, Belarus is negotiating an agreement with the World Bank on a loan of USD 150 m for the Minsk-Gomel road reconstruction program. The situation is worsened by the fact that road fund resources of around BYR 400 bn have been annually spent on non-core activities, such as agricultural programs. In 2010, expenditures in the road sector will be financed directly from the local government budgets and the total sum is reduced by the BYR 400 bn mentioned above. As a result, in 2010 only 120 km (of a total of 15,000 km) of roads are planned to be repaired.

In 2009, the freight transportation sector continued to suffer from external shocks. The global economic crisis, accompanied by declining external trade, led to a reduction of road freight transportation in Belarus by 2.2% (intensity by 2.4%). To some degree the reduction of international road freights, which are most exposed to the volatility of the world economy, was compensated by increased transportation on the domestic market. The volume of the freight transported even slightly grew by 0.3% in 2009, showing that the general reduction was due to the distance factor. The freight tariffs grew by 9.8% in 2009, increasing the advantages of the auto transport sector against the railway sector, that suffered a much faster tariff growth. In addition, the sector benefited from tax liberalisation, especially the abolition of the turnover taxes.

The main event in the sector was actually the announcement of the creation of a new customs union with Kazakhstan and Russia. The outcomes of such a union for the Belarusian freight transportation sector can be hardly predicted. However, there should not be a significant increase of trade among these countries, as there are almost no import duties levied on intra-CIS trade. Besides, import tariffs in Belarus and Russia are almost fully (98%) harmonised even without the union. The most obvious advantage that Belarus could gain from a union is an increase in transit through its territory. The volume of goods imported to Russia via Belarus would be growing because Belarus’ customs service allows electronic declarations and is faster and more flexible than the Russian one. This growth is expected despite the widespread practice of obligatory convoy, disproportionately high fines for minor violations of the customs rules. However, Belarusian transport firms will not gain much from this increase, as their possibility to operate in the Russian market depends on the number of licences issued for Belarusian companies. Russia is obviously not interested in raising this amount, while Belarus claims that single customs territory means full access of transport firms from Belarus to the Russian market. Besides, this approach will in perspective grant Belarus access to the Chinese market, as only transport firms from neighbouring countries are allowed to service freight transportation in China.

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5 Intensity is measured as a ratio of freight transportation in tone-km to GDP in real terms.
Due to legal and regulatory barriers as well as unfair competition from state companies private passenger transportation sector remain underdeveloped. The most controversial issue is the status of the passenger transportation operator that should mediate between contractors (local authorities) and carriers. The state carriers are usually functioning also as operators, thus enjoying privileges over private carriers. Besides, as there are no instructions on the procedure of the implementation of the contract between the operator and the private carrier, the functions of control and levying fines are exercised by the operator, who in practice is also a rival of the private carrier. As a positive development in the sector one may consider the reduction of the tax burden. In 2009, the tax rate for carriers operating within the simplified taxation system was reduced from 8% to 5–6% of the revenue. However, the presence of the numerous barriers and the economic crisis caused a reduction of the passenger transportation volume of private carriers by further 28.2% yoy in 2009. Private carriers accounted only for 3.8% of all passenger traffic (compared to 9.2% in 2007). The overall passenger traffic and its intensity fell by 7.7% and 5.8% yoy respectively (see Figure 6). The fall of the number of passengers transported is less significant (2.4% yoy) indicating an over-proportionate reduction in long-distance journeys. The decline in passenger transportation was caused both by the global economic crisis and increased tariffs. Suburban and intercity tariffs increased by 22.0% and 14.6% yoy respectively, which is much higher than the overall inflation level in Belarus (see Table 3).

**Figure 6:**
Auto transportation intensity

![Auto transportation intensity graph](image)

*Source: own calculations based on data of Belstat.*

**Table 3:**
Price indices of auto transportation services, yoy

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight transportation</td>
<td>163.6</td>
<td>137.2</td>
<td>138.4</td>
<td>125.8</td>
<td>111.6</td>
<td>108.7</td>
<td>110.7</td>
<td>114.0</td>
<td>110.0</td>
</tr>
<tr>
<td>Passenger transportation suburban</td>
<td>172.5</td>
<td>213.7</td>
<td>151.0</td>
<td>150.4</td>
<td>123.3</td>
<td>119.6</td>
<td>113.3</td>
<td>104.6</td>
<td>122.0</td>
</tr>
<tr>
<td>interurban bus</td>
<td>168.5</td>
<td>175.3</td>
<td>136.7</td>
<td>135.9</td>
<td>126.2</td>
<td>113.5</td>
<td>113.2</td>
<td>104.6</td>
<td>114.6</td>
</tr>
<tr>
<td>Consumer price index</td>
<td>161.1</td>
<td>142.6</td>
<td>128.4</td>
<td>118.1</td>
<td>110.3</td>
<td>107.0</td>
<td>108.4</td>
<td>114.8</td>
<td>112.9</td>
</tr>
<tr>
<td>Service price index</td>
<td>216.8</td>
<td>193.4</td>
<td>161.9</td>
<td>121.2</td>
<td>112.0</td>
<td>113.2</td>
<td>108.8</td>
<td>106.9</td>
<td>113.9</td>
</tr>
</tbody>
</table>

*Source: Belstat.*

---

6 The data represents the passenger transportation volume only of individual entrepreneurs. In 2009 the fall was 54.8% due to the new legislation regulating individual entrepreneurship (see Belarus Infrastructure Monitoring 2009).
As a result auto transportation suffered growing losses in 2009, 4.8% compared to 3.3% in 2008 proving the inefficiency of the sector and the need for reforms.

### 3.2.2. Reform agenda

Sustainable development of the road network requires an improvement of financing of road construction and maintenance. By abandoning to finance activities not related to the road industry from the road fund (and saving this sources for the road sector) additional financial scope could be gained. The natural monopoly operator Belavtodor should be given more independence from the Ministry of Transport to ensure that decisions on financing road construction and maintenance are less influenced by the transport lobby.

High import taxes on vehicles hamper competitiveness of Belarusian carriers compared to railways and carriers of other countries. To make competition fairer, it is necessary to lower taxes on imported trucks. The customs union with Russia and Kazakhstan is not going to solve the problem as the mutual tariffs are being set equal to the ones implemented in Belarus. However, this action will not help MAZ as its main rival is KAMAZ rather than trucks imported from the rest of the world. The other acute problem of a high tax burden on freight carriers has been mitigated, however, by recent simplifications in taxation, including the abolishment of agricultural levies. At the same time it is equally important to start the restructuring and privatisation of state-owned truck companies.

The government has to ensure equal treatment of private providers and public companies (including the same requirements for the technical characteristics of vehicles, the use of cash registers, equal access to routes etc) in order to maintain an urban passenger transportation market. The roles of contractors and operators of transportation services should be separated by legislation. The right to operate in the market should not be granted to companies providing transportation services. Instead, a regulatory body should be established – independent both from state administration and service providers. Furthermore, the sources of finance of the operator should be clearly defined. At present, officially the operators service should be paid from local budgets. But, the absence of a corresponding law encourages local authorities to levy this financial obligation on the private passenger carriers. Besides, the trade union of “Sadruznast” argues that there should be changes to the tariff setting procedure. First of all, regional councils should not be involved in regulating the tariffs of private firms, which should be done by the Ministry of Economy. Second, if enterprises are functioning under the simplified tax system – as most of the private carriers registered in the form of individual entrepreneurs do – tariffs for their services can not be regulated as it contradicts legislation on simplified taxation. However, transport services happened to be exempted from this general case without much reason. Third, “Sadruznast” suggests considering carriers running M2 category busses as providing transport services of improved quality, which means tariffs for them should not be regulated.7

Since all public transportation companies now operate at a loss, the government needs a strategy for their restructuring. If the losses are incurred because of government intervention (rather than organisational inefficiencies) these losses should be reimbursed from the public purse. A first step would be to sell off all freight transport vehicles and other redundant assets since private sector firms provide the major part of the overall volume of service. A considerable part of the redundant assets could be sold to private transportation companies.

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7 Stepanov V. (2010). Liberlisation... for the monopolist. Автоперевозчик (Auto carrier), N1, 2010.
3.3. Telecommunications

3.3.1. Progress in 2009

There were no substantial reforms in the telecommunications sector towards liberalisation in 2009. Main developments in the market were associated with the introduction of new internet communication technologies, attempts of mobile telecommunication operators to attract subscribers from competitors (due to market saturation) and increased returns from subscribers.

The law “On Telecommunications” from 2005 remains the primary source of regulation of the telecommunications market. Despite attempts to make amendments to the law in 2008, aimed at the sector’s deregulation and cancellation of the monopoly of Beltelecom\(^8\), they were not realized. The Program of Telecommunications Development in Belarus for 2006–2010, and the State Program of Rural Sector Development for 2005–2010 (in the part concerning telecommunications)\(^9\) have also remained unchanged. Different telecommunication technologies remain differently treated in Belarus. Beltelecom owns the external communication channel as well as the internet infrastructure, landlines and other assets, making independent providers to rent these from Beltelecom. On the other hand, the mobile infrastructure is already privatized, although Beltelecom still controls cross-plugging between mobile operators.

After a single-step devaluation of the Belarusian Ruble in January 2009, telecommunications operators, like many other economic operators, strived to increase tariffs for their services. The tariffs for telecommunication services are set in Belarusian ruble, but infrastructure investments are performed in foreign currencies. Therefore, the devaluation primarily concerned the mobile operators “Mobile TeleSystems” Joint Ltd. (MTS, brand name “MTS”)\(^10\), FE “VELCOM” (brand names “velcom” and “PRIVET”)\(^11\), CJSC “Belarusian Telecommunications Network” (BTN, brand name “life:)”)\(^12\) and SP “BelCel” (brand name “dialog”)\(^13\) as they have been particularly active in infrastructure investments in the recent past. The operators decided to increase tariffs by about 20-30% (devaluation rate). The state strived to prevent such a price hike. The majority of mobile operators in Belarus are private companies, thus, the state can involve in their price policies only by means of recommendations. Still, the state remains the majority shareholder at one of the market leaders, mobile operator MTS. It forced MTS to bring tariffs back to the pre-devaluation level, which, however, lasted only for one month when the tariffs went up again. As a result, all mobile operators introduced several new tariff plans to increase returns from subscribers. According to Belstat data, in 2009 tariffs for mobile communications in the country have increased by 13.5%.

The earnings of mobile operators MTS and VELCOM in 2009 were negatively hit not only by the devaluation, but also by market activity of the new operator BTN with the brand name

\(^8\) Beltelecom belongs to the Ministry of Communications and Informatisation and operates under its direct supervision. Beltelecom is the “national telecommunications operator”, implementing state policies in the sector. Beltelecom’s monopoly applies to external telecommunications as well as the distribution of international traffic for the independent private operators.


\(^10\) The amount of subscribers of MTS is 4.56 m. Owners: Beltelecom–51% and Mobile Telecystems – 49%.

\(^11\) The amount of subscribers of VELCOM is 4.1 m. Owner: SB Telecom Ltd. – 100%.

\(^12\) The amount of subscribers of BTN is 1 m. Owners: Turkcell – 80%, Beltelecom – 20%.

\(^13\) The amount of subscribers of BelCel is 132 thsd. Owners: CIB BV and Beltelecom.
“life:)” and its low tariffs, which caused a runoff of subscribers from the “big two”. According to the BTN management, the company does not currently aim to break-even and can therefore sustain losses for several more years, keeping tariffs below the market average. As a result of such market conditions, MTS and VELCOM experienced decreases in returns from subscribers (Average Revenue per User, ARPU), as well as a decrease in the average mobile traffic per subscriber. The average revenue per user at MTS accounted for BYR 21.8 thsd in 2009 (compared to BYR 20.7 thsd in 2008). The average revenue per user at VELCOM decreased from EUR 8.2 in 2008 to EUR 5.5 in 2009\(^{14}\).

Mobile operator MTS was active in attracting “heavy” corporate subscribers. MTS reports that 78 out of the top-100 taxpayers in the country are its subscribers. This is not surprising, as MTS and the majority of these enterprises belong fully or partially to the state. VELCOM has kept another focus in its marketing policy. It remains the leader in the small- to medium-sized corporate segment – serving around 70% of Belarusian enterprises and organisations. According to the Ministry of Communications and Information, the number of mobile subscribers in the country was 9.6 m in 2009. MTS has lost 6% market share — from 52% in 2008 to 46% in 2009. The market share of velcom has decreased from 44.8% to 42.7% in the years 2008 and 2009 respectively. The market share of BTN, on the contrary has considerably increased from 2.8% in 2008 to 10.3% in 2009, amounting to 1 m subscribers.

In 2009, competition in the mobile internet has become sharper. In May 2009, VELCOM has announced an exclusive agreement with BelCel on provision of broadband internet access services based on the cdma2000 technology (EV-DO Rev.A). In October 2009 mobile operator BTN obtained a license for the internet access technology 3G and started its commercial use in November 2009. It facilitated the life:) brand recognition and attracted the most mobile group of population as subscribers – youth and businessmen.

In 2009 mobile operators MTS and VELCOM were recognized again as monopolists in the telecommunications sector in the State registry of monopolist enterprises. This list also contains Beltelecom. The Resolution of the Council of Ministers N1256 from 29.09.2009 added Beltelecom to the list of enterprises subject to privatisation in 2006-2010. But the anticipated corporatisation of Beltelecom, preceding privatisation, was not realized. According to the Ministry of communications and information, there is no need for the corporatization of Beltelecom and attraction of strategic investors to large-scale investment projects at the moment, as their own funds are currently sufficient. According to market experts, if Beltelecom is going to be sold, it will be done in parts, which will mostly be its peripheral businesses, including for example IPTV ZALA, the internet provider with the brand name byfly\(^{15}\), the majority stake at MTS, the data processing centres and others. This action would be a move towards market liberalisation, although Beltelecom would still keep its monopoly in providing connections to international calls as well as the internet. At the same time, being a 100% state-owned enterprise, Beltelecom was active in 2009 in investing in the development of different telecommunication services: IPTV ZALA, internet access technology WiMax, Wi-Fi access points\(^{16}\) and increased the capacity of external gateways from 7.2 Gbps in 2008 to 23 Gbps in 2009. The number of IPTV subscribers in 2009 totalled 70 thsd, which is 40% higher than the projected 50 thsd subscribers.

Out of all telecommunications services, broadband internet access develops most rapidly. The number of broadband internet access subscribers in 2009 was 730 thsd, including the 459.4 thsd byfly’s subscribers (the amount of subscribers of byfly was 150 thsd in 2008).

\(^{14}\) The report of VELCOM is presented in EUR.

\(^{15}\) The brand name of the national telecommunications operator Beltelecom in the internet connections sector.

\(^{16}\) In 2009 in Belarus were installed 343 Wi-Fi internet access points, 262 out of them in Minsk. The total amount of Wi-Fi internet access points in the country 645.
According to the survey of the Independent Institute for Socioeconomic and Political Research, 41.4% of the population in Belarus or 3.99 m people had access to the internet in 2009, compared to 34.4% in 2008. Two thirds of the Belarusian internet traffic goes to Russia, which indicates the weak development of internet-based services in Belarus.

In April 2009, Beltelecom decreased tariffs for internet access for independent secondary providers (Beltelecom is the primary provider) by 25%. This decrease in tariffs was welcomed by providers, which still heavily depend on the monopolist Beltelecom in their pricing policies. Beltelecom decreased its tariffs for internet access for end-users under the brand name byfly more intensively, than for independent providers, thus threatening the loss of subscribers and posing risks for their investment programs. At the same time, Beltelecom’s revenue from internet access services increased from 0.5% of the total Beltelecom’s revenue in 2006 to 17% in 2009, becoming an important source of Beltelecom’s profits.

According to Beltelecom’s representatives, its investments in 2010 will go to the development of networks, further introduction of digital commutation systems, development of rural telephone networks, including those in agro-towns, development of wireless WLL technologies, increase of Wi-Fi internet connection points, development of auxiliary high-quality telecommunications services and the development of the WiMax technology. The sources of Beltelecom’s investments also come from the fund of the universal maintenance, created in 2007. The means for this fund are obligatory payments of telecommunication operators in the amount of 1.5% of the revenues received from providing telecommunication services.

Within the framework of the State Program of Telecommunication Sector Development, 220 thsd phones were introduced to local networks in 2009, including 120 thsd at urban telephone exchanges (out of them 70 thsd based on WLL technology). The density of landline phones per hundred persons has risen to 41 in 2009 (40.4 in 2008).

In 2009, tariffs for local connections in Belarus increased by 7.2% and for international connections by 0.4%. Such an increase in tariffs has not surpassed the inflation rate in the country (CPI=13%), though. It indicates the absence of any considerable decrease in cross-subsidies in the sector (see Figure 7). Still, prices for international connections grow slower than for local connections, thus indicating a positive tendency in the elimination of cross-subsidies.

**Figure 7:**
Annual Growth of Telephone Communication Tariffs for Households and CPI (in %, 2001–2009)
The profitability of the telecommunication sector decreased in 2009. The net profit of telecommunication organisations accounted for BYR 828.1 bln, which is 29.2% less than in 2008. The rate of return decreased from 37.8% in 2008 to 32.3% in 2009 (Table 4). The decrease in profits was associated with the international financial crisis and decreased purchasing power of the population and increased costs (investments in the development of infrastructure).

Table 4: Profitability of telecommunications services (in %, 2003–2009)

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>13.5</td>
<td>26.9</td>
<td>37.5</td>
<td>45.1</td>
<td>40.4</td>
<td>37.8</td>
<td>32.3</td>
</tr>
</tbody>
</table>

Source: Belstat.

Thus, in 2009 as in previous years the telecommunication sector in Belarus remained highly monopolized. The basic telecommunication services were provided at tariffs below cost and thus cross-subsidisation remained. Beltelecom’s monopoly hindered the development of competition in the market and introduction of innovative services at low cost.

The main characteristics of the telecommunication sector in 2009 were:

− persisting social orientation in the government’s policy in the sector and cross-subsidies;
− absence of awaited reforms of legislation, regulation of telecommunications;
− intense competition between mobile operators for existing subscribers due to the decrease in the purchasing power after the international financial crisis;
− investments in new telecommunication technologies, in particular those in internet connections, IPTV, increase in quality and spectrum of telecommunication services;
− gradual decrease in tariffs for internet connections;
− preservation of exaggerated tariffs for innovative telecommunications services and international calls.

3.3.2. Reform agenda

There were no regulatory changes in the telecommunications sector in 2009. As a result, our policy recommendations remain the same. Active government interference in the decision making at the micro and macro level constraints development in the sector. Changes should focus on the creation of a competitive and attractive investment environment. In this regard, the following telecommunication sector reforms are important:

− Monetisation of benefits for separate population groups. Social benefits should be provided in the form of direct money compensations.
− Abolishment of cross-subsidisations of local connections at the cost of long-distance connections. Prices should be set at cost covering levels. This step would facilitate competition, lower tariffs for long-distance calls, increase attraction for investments, bring conformity to international norms in telecommunications regulation and facilitate integration of the country in the world’s telecommunications market.
− Pursuing profitability and operational efficiency in the telecommunications sector. Companies should provide social benefits only if these are directly compensated from the state budget.
- Removal of the monopoly on the delivery of long-distance and international calls as well as IP-telephony services. Access of private companies to these segments will foster price competition and ensure a dynamic development of the fixed telephony sector.
- Privatisation of Beltelecom in order to remove the state’s monopoly in the sector. This step will provide transparency of its activity and will increase management motivation and efficiency within the sector.
- Creation of an independent regulator in the telecommunication sector shielding market participants from political interventions in order to ensure long-term market stability and a level playing field. The regulator should also ensure market discipline while protecting consumer interests and facilitating open access to the core infrastructure of the network. The independence of such a body from direct political intervention has often been cited as means of building trust among investors in a newly liberalized sector.

3.4. Gas

3.4.1. Reforms in 2009

The natural gas sector in Belarus is dominated by the state-owned enterprise Beltopgaz, which is managed and controlled by the Ministry of Energy of Belarus and JSC Beltransgaz. While Beltransgaz is responsible for natural gas transportation to Belarus and managing natural gas transit, Beltopgaz deals with the distribution and retail sales of natural gas to final consumers inside Belarus.

During 2009 the gas sector in Belarus faced no structural changes. The agreed price increases for imported natural gas were carried out and another 12.5% of Beltransgaz shares were sold to Gazprom. The modest price growth of natural gas imports resulted in higher prices for consumers, but did not catalyze any structural changes.

Under the contract between Beltransgaz and Gazprom for natural gas supplies and transit from December 31, 2006, the gas price for Belarus is pegged to the average European price and subject to a discount. In 2009 Belarus was supposed to pay 80% of the average European gas price minus transport costs and the export duty (30% of Gazprom’s selling price)\(^\text{17}\). However, due to requests from Belarus, Russia reduced its rate to 70%. Besides agreements on prices for 2007-2010, both sides agreed in the 2006 contract that Gazprom would buy 50% of Beltransgaz shares for USD 2.5 bn (solely in cash) in equal portions of 12.5% each over a four-year period. Accordingly, in 2009 Gazprom acquired the next 12.5% of Beltransgaz shares for USD 625 m, controlling 37.5%.

Among other changes in the sector, one can mention the corporatisation of 11 enterprises, mainly connected with peat mining or production of equipment for peat mining. All shares of the newly created joint stock companies (JSCs) belong to the Belarusian state.

Belarusian natural gas imports in 2009 were 4.5 billion cubic meters short of the contracted volume of 22.1 billion cubic meters. Belarus fell behind the gas import schedule by a third in the first few months of 2009, when fuel oil (a reserve fuel) was burnt at Belarusian CHPs to save expensive Russian gas. The government had decided to use cheaper fuel oil instead of natural gas, thus saving USD 304 m during the heating season.

In addition European consumers reduced Russian gas consumption and transit volumes going through Belarus fell to 44.2 billion cubic meters in 2009 from 51.2 billion cubic meters.

\(^\text{17}\) In 2010 it is supposed to pay 90% of what Europeans pay and the year 2011 will see Belarus pay as much as European consumers minus transport costs. Also, Belarus is obliged to pay in monetary assets (barter and offset schemes must be ruled out).
in 2008. Gas transit is controlled mostly by the Russian side, and Belarusian transit revenues amount to USD 400 m annually, which cannot be compared to, for example, Ukrainian transit proceeds. The construction of new gas pipelines bypassing Belarus will enable Russia to further cut “transit rents”. All attempts of the Belarusian administration to convince Russia of the efficiency of the construction of a second Yamal-Europe gas pipeline in Belarus have been unsuccessful. Until October, 2009 the price at the Beltransgaz pipeline was USD 1.45 per tcm per 100 km and USD 0.43 at the Russian Yamal-Europe pipeline. For the last three months of 2009 the transit fee for the Beltransgaz pipeline was increased to USD 1.79. The Beltransgaz’s margin was also increased by USD 10.45 in October. These increases were based on the contract signed between Belarus and Russia at the end of 2006.

In 2009 Belarus continued to buy Russian gas for relatively low prices. Because the price of the oil basket, to which the gas price is pegged, changes on a quarterly basis, Belarus saw natural gas prices change once in every three months (Figure 8). However, Belarus was paying USD 150 per tcm of natural gas in 2009 which was the projected annual average price. The actual average price turned out to be a bit lower, at USD 148 per tcm, which represents an increase of 16% year-on-year. As a result, Belarus was accumulating its debt for gas during 2009; however, the USD 246 m debt reported in late 2009 was paid up before the end of the year.

Figure 8:
The development of prices for imported natural gas from Russia, 2001–2009

![Figure 8: The development of prices for imported natural gas from Russia, 2001–2009](image)

Note. Without VAT.
Source: The Ministry of Statistics and Analysis.

Gazprom was not paid for gas supplied from January until June 2009 – which amounted up to USD 285 m. However, in August 2009 Beltransgaz started to pay back its debt, so that by December 23, 2009 the entire debt was paid back (Table 5). The situation with respect to final consumers’ payments improved also. Almost all payments (99.9%) for natural gas were made in cash. Collection ratio for internal payments even exceeded 100%. As a result, arrears of domestic consumers considerably slowed down. Besides such improvements, there were still special and reduced prices for gas for some industrial and agricultural enterprises, which also enjoyed delays – granted by the government – in paying back debts of previous years (mainly agriculture).

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18 Although the verbal agreement between the two presidents enabling Belarus to pay the average price was never officially documented as a supplementary contract.
Since import prices rose only 16% year-on-year, the rise in prices for final consumers was also moderate. Gas fees for most of Belarus’ manufacturers were raised by 9.8%: from USD 158.67 to USD 174.18 per tcm of gas (VAT not included), by January 1, 2009. Some consumers (Belenergo, selected petrochemical, peat-producing and light industry companies) continued to enjoy preferential prices, paying just between 50% and 80% of the official price.

Gas tariffs for households rose in January 1, 2010. Prices increased by 3% for households that reside in apartments with central hot water supply and gas cookers and 20% for households in apartments without central hot water supply and gas cookers and gas water heaters. One should point out, that in dollar terms, due to the 20% devaluation of Belarusian Ruble made on January 2, 2010, tariffs for households even slightly decreased. For example, tariffs for gas, used for heating and hot water in the heating season amounted to USD 77 (USD 80 in 2009); during summer it was USD 163 (USD 170 in 2009). Therefore, this can be seen as proof for the increase of cross-subsidisation which remained to be a serious problem, hurting the financial status of Beltopgaz.

### 3.4.2. Reform agenda

The crucial importance of natural gas to the Belarusian economy requires a stable and affordable natural gas price and a secure natural gas supply. On the other hand, required investments in infrastructure and equipment should – at least partially – be financed by private investors. This is in particular true given the limited availability of public funds. Inevitably rising prices for imported natural gas enhances the importance of possible costs reduction and efficiency increases within the sector. Hence, a natural gas industry oriented policy should be directed towards a sustainable, profit-oriented development whilst providing sufficient investment incentives to the private sector. In this context the following changes seem to be required:

- Tariffs for final consumers must become cost-reflective for households and for industries without allowing for cross-subsidisation. Prices for all industrial consumers should be equal and costs should account for investment needs;
- If providing social privileges to some groups of households remains a priority of the government, it should be dealt with in a transparent manner. Here, targeted aid or direct income subsidisation might be considered;
- Significant and deep restructuring of Beltopgaz and Beltransgaz is needed, first of all for finding ways to reduce costs. Both companies are overburdened with non-productive assets, and (although in part already officially corporatised) are not independent to make financial and investment decisions. Restructuring and corporatisation also include the necessity and the possibility to divest all ancillary enterprises not related to the core business;
- In order to avoid cross-subsidisation between different activities within a single firm (a particularly severe impediment for the development of competition between dif-

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ferent activities), full corporatisation must include a strict legal separation (unbundling) of network operations and natural gas supply (retail) activities within each company. In case of Beltransgaz a separation of international transit and domestic transmission is also necessary. Furthermore, in order to ensure creditworthiness, all companies should provide a sufficient degree of transparency, e.g. through regular independent audits according to international standards;

- In order to avoid excessive interference, the sector needs a regulator that is independent of both the natural gas industry and the government. This body should define the rules of the game, and consider the interests of all groups involved. Among its first actions, the regulator should change the tariff policy for final customers which will bring more competition into the sector.

3.5. Electricity

3.5.1. Reforms in 2009

The Belarusian power system is governed by the state enterprise Belenergo, which is accountable to the Energy Ministry of Belarus. The power sector of the country consists of only one vertically integrated company, in which generation, transmission and distribution are not separated.

Electrical power generation in Belarus totalled 30.1 billion kilowatt-hours (kWh) in 2009, a drop of 14% from 2008. Although Belarus is capable of meeting its domestic requirement on its own, it is more profitable to import electricity during the summer. Belarusian imports of power from Russia reached 2.908 billion kWh in 2009, an increase of 34% yoy. The payment discipline remained strict; barter schemes have been almost liquidated (the share of non-monetary payments amounted less then 1%). The collection ratio for internal consumption exceeded 100%. Therefore, the existing arrears of the final consumers to Belenergo were significantly reduced (Table 6). Also, there were still special, reduced prices for electricity for some industrial and agricultural enterprises, which enjoyed delays – granted by the government – in paying back debts of previous years (mainly agriculture).

Table 6:
Debts from electricity consumption (USD m)

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<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic consumers</td>
<td>328.62</td>
<td>293.92</td>
<td>222.52</td>
<td>152.48</td>
<td>148.2</td>
<td>29.7</td>
</tr>
</tbody>
</table>

Note: Data provided as of the 1st January of the reported year.
Source: Belstat.

During 2009 electrical power tariffs for all consumer groups remained stable. Taking into account the devaluation of Belarusian Ruble, tariffs for industrial consumers decreased by 25%, in terms of USD. Households paid US 6 cents compared to 9 cents in 2008 (see Table 7). As a result, cost coverage worsened and cross-subsidisation remained a serious issue (industry electricity prices were still almost 50% as high as residential prices even though the cost for distributing electricity to residential customers are generally higher).

During 2010 the Belarusian government continued its efforts to increase energy efficiency and the use of local fuels for energy production. According to plans of the government mini-CHP’s operating on local fuel should be installed in every district of Belarus in the coming 3-4 years. In 2009 the share of local fuel in the entire energy mix reached 21% and it is planned that by the end of 2010 it would account for 25%. In Belarus a few mini-CHP’s

20 The system is organiser in six independent regional republican unitary enterprises (RUPs also called oblenergos).
working on local fuels have already been built, (in Vileika, Bobruisk, Osipovichi and other cities). The most efficient one is the mini-CHP in Prugany (3.7 MWe), built in 2009.

**Table 7:**
Electricity production costs and prices for different groups of consumers (US cents per kWh)

<table>
<thead>
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</tr>
<tr>
<td>Industry with</td>
<td>Cost</td>
<td>5.86</td>
<td>na</td>
<td>7.43</td>
<td>7.43</td>
<td>7.43</td>
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<tr>
<td>capacity 750 KWe and more</td>
<td>7.15</td>
<td>10.20</td>
<td>10.32</td>
<td>10.62</td>
<td>12.08</td>
<td>9.89</td>
<td>7.38</td>
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<tr>
<td>Industry with</td>
<td>Cost</td>
<td>9.21</td>
<td>10.59</td>
<td>10.68</td>
<td>11.00</td>
<td>12.08</td>
<td>12.08</td>
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<tr>
<td>capacity below 750 KWe</td>
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<tr>
<td>Budget financed organisations</td>
<td>Cost</td>
<td>7.17</td>
<td>10.20</td>
<td>10.32</td>
<td>10.62</td>
<td>12.08</td>
<td>12.08</td>
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<tr>
<td>Other non-industrial enterprises</td>
<td>Cost</td>
<td>5.23</td>
<td>5.23</td>
<td>5.40</td>
<td>6.76</td>
<td>6.76</td>
<td>12.08</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Cost</td>
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<td>5.18</td>
<td>7.78</td>
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<td>10.59</td>
<td>10.68</td>
<td>11.00</td>
<td>12.08</td>
<td>8.19</td>
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</table>

Source: The Ministry of Energy.

The Belarusian government increased annual spending aimed at saving energy. For example, USD 1 bn was invested in energy efficiency policies in 2009 compared to USD 600 m in 2006. According to data of the Energy Efficiency Department, financing of projects contribute to save energy will amount up to USD 1.366 bn in 2010. As a result of these investments, 2.21 m toe would be saved. However, also the marginal costs of such policies increase. Specialists from the Energy Efficiency Department say that during the last years all low cost options have already been implemented. For example, in 2001 to save 1 ton of fuel one had to invest USD 100, in 2009 for achieving the same effect one already needs to invest USD 726. Therefore, energy saving policies will demand increasing funds from state and enterprise budgets.

**3.5.2. Reform agenda**

The Belarusian electricity sector is faced with a long phase of underinvestment, low efficiency and comparatively high generation costs. These challenges can only be met by strong investment in generation, transmission and distribution capacities. According to our estimates, the investments requirements until 2020 will amount to USD 20–30 bn. In the current environment we think that neither the state budget nor Belenergo’s cash flow will be sufficient to meet the financing needs. Consequently, private and in particular foreign investment is needed. Foreign investors, however, will not engage unless the current regulatory environment (vertically integrated state owned monopolist Belenergo and a poor legislative basis) is significantly altered.

The tariff policy requires substantial changes. First of all, industrial tariffs are too high (significantly above costs) due to cross-subsidisation, privileged pricing for some industrial consumers, debts, etc., while tariffs for households are below costs. Secondly, the policy of eliminating cross-subsidies has been inconsistent and incomplete, and a complete elimination of household cross-subsidisation has not been achieved yet. Thirdly, subsidized energy prices for other groups, mostly industrial and agricultural enterprises remain an important issue. Moreover, a tariff policy vis-à-vis privileged industrial enterprises remains
unpredictable and subject to political influence. Tariff eligibility criteria are often vague, leading to misallocation of resources, rent seeking and inconsistent information for future planning. An overregulated tariff policy creates numerous distortions to the market, provides wrong information and incentives to customers (i.e. reducing motivation to save energy) and decreases investment funds of energy companies.

It is worth to mention, that inevitable price increases for imported Russian natural gas requires urgent measures to prevent sharply escalating electricity costs and tariffs. Modernizing some of the power plants in order to use domestic and renewable energy sources is useful, but can only provide a partial solution. A nuclear power station (if a decision for building it is made) will not be active before 2016.

As it was already mentioned, the Belarusian electricity sector operates inefficiently with large deferred investments. The following measures are needed to enable the electricity sector to provide the desired outcomes:

− Tariffs should be set at cost-reflecting and equal levels for all consumers without any price privileges or cross-subsidisation;
− If providing social privileges to some groups of households remains a priority of the government, it should be dealt with in a transparent manner with the help of targeted aid or better via direct income subsidisation;
− Gradual implementation of a tariff differentiation schemes could be very useful. Already a 5% reduction in peak load, could provide essential savings on fuel and capacity costs. Furthermore, these schemes would contribute additional benefits, including the reduction of ancillary services costs, spending on transmission system extensions and CO₂ emissions, as well as a rise in electricity consumption awareness that induces additional electricity savings and assuring a constant load for the intended nuclear power plant and renewables in off-peak periods.²¹
− An independent regulator creating incentives for cost cutting should be established. The system should be transformed from a centrally planned into a self-developing market, where the state only guarantees that no single market actor or the state itself abuse market power;
− The policy of further and stricter budget constraints for consumers should be continued. It is therefore reasonable to permit non-paying consumers, including public utilities etc., to be disconnected;
− Guaranteed third party access to the transport and distribution networks should be gradually opened on a clear non-discriminatory basis;
− Corporatisation and restructuring of all regional branches of Belenergo (oblenergos) and of all ancillary businesses should step by step start. The best results with respect to efficiency improvements, investments and privatisation revenues can only be attained by a full scale restructuring. This should be implemented on a step by step basis, but in a consistent and decisive manner.²²

Once these steps have been taken, the government will be in a position to address the next important issue: increase efficiency within the sector (lowering costs). International experience shows several ways of improving efficiency within the sector through increasing competition and changes in motivating management (e.g. systems of pool or bilateral contracts).

²² For more detailed information on possible ways of electricity sector restructuring see RC IPM-GET Policy Paper PP/05/08 “Restructuring the Belarusian Electricity Sector: Setting the Agenda”, http://research.by/pdf/pp2008e05.pdf or the second chapter of this publication.
Appendix 1

General description of the infrastructure indicators

This appendix presents a brief description of the criteria for scoring each indicator on a scale of 1 to 4.

1. Commercialisation and privatisation

1.1. Ownership

1.1.1. Natural monopoly. This indicator is concerned with the ownership of the natural monopoly part of the infrastructure business, e.g., most of the networks. A score of one means that the whole network is state owned; the score increases with an increasing share of corporatized, privatized and newly constructed private fixed networks in the total length of networks. The maximum score 4.0 is reached with private ownership of all networks.

1.1.2. Potentially competitive business. A potentially competitive business is an operator using networks to provide its services; it is a market related to a natural monopoly. A score of one implies that the businesses are part of the state owned natural monopoly. The score increases with separation, corporatisation and privatisation of existing operators, or with increased market penetration by newly established private agents. The maximum is reached when all the businesses are in private ownership.

1.1.3. Ancillary business. Ancillary businesses are concerned with network construction, its maintenance, inputs supplies, and social infrastructure. A score of one means that these businesses are state owned. The score increases with the degree of separation, corporatisation and privatisation, or with increases in new private establishments.

1.2. Operation

1.2.1. Natural monopoly. A score of one is given when the natural monopoly is operated as a government department. The score increases with reorganisation into an independent state agency or a company and establishment of an independent regulator. The maximum score is assigned if a private company manages the natural monopoly, subject only to an independent regulator, established by law.

1.2.2. Natural monopoly planning and investment decisions. A score of one implies political interference in business and investment decisions. The score increases as commercial objectives such as profitability and operational efficiency grow in importance. The highest score applies if network extensions and new investment projects are realized solely based on profitability considerations and reflect marginal social costs.

1.2.3. Private sector participation in service contracts. A score of one means that the private sector does not participate in construction, maintenance or rehabilitation, etc. The score increases with increasing participation in these activities by the private sector.

1.3. Organisational structure

1.3.1. Separation of natural monopoly and potentially competitive businesses. A score of one means separation neither between the infrastructure and the service providers’ managements, nor between the managements of different service providers. The score increases with unbundling of the industry. The highest score applies when different services are provided by separate private companies.
1.3.2. **Separation of ancillary businesses.** A score of one means no separation of ancillary businesses from the natural monopoly or potentially competitive businesses. The score increases with increasing degrees of separation. The maximum score is assigned when ancillary services for the natural monopoly and for potentially competitive businesses are supplied by the market.

1.3.3. **Decentralisation.** A score of one implies no or minimal decentralisation and increases with increasing decentralisation. Decentralisation is both regional and functional and implies autonomy of decision making at the regional level concerning tariffs and investments. The highest score is assigned when the industry is divided into competing regional operators.

2. **Tariff reform**

2.1. **Structure of tariffs**

2.1.1. **Political vs. regulated operators.** A score of one implies strong political interference in tariff setting. The score increases with declining political interference and its transfer from the central government to the corresponding government agency and finally to the regulatory body. The maximum score is reached for full cost reflective tariff setting by an infrastructure operator regulated by an independent regulator.

2.1.2. **Natural monopoly pricing.** A score of one corresponds to pricing below cost accompanied by a substantial amount of cross-subsidisation. The score increases as the tariff approaches the long-run marginal cost reflecting cost covering levels, with cross-subsidisation declining.

2.1.3. **Potentially competitive businesses pricing.** A score of one means a lack of cost reflective pricing. The score increases with markets becoming increasingly competitive and prices approaching market equilibrium levels.

2.2. **Payments**

2.2.1. **Intra-industry payment ratios.** A score of one implies that arrears are constantly accumulating and transactions between companies within an industry are basically non-monetary. The score increases as monetary settlements are carried out and arrears approach zero.

2.2.2. **Final consumer collection rates.** A score of one means low revenue collection from final consumers (households, companies, state organisations) and constantly accumulating arrears. The score increases as progress with revenue collection is made and services are fully paid for.

2.2.3. **State indebtedness.** A score of one corresponds to growing arrears for state compensations to privileged consumers. The score increases as this indebtedness is reduced to zero.

2.3. **State funding**

2.3.1. **Subsidies level.** A score of one means that some groups of consumers are heavily subsidized by the state in an explicit or implicit form. Both the depth of the subsidisation and the distribution of subsidies are important. The government may pursue a constant practice of debt forgiving and restructuring. Abstention from implicit and explicit subsidies leads to improved scores.

2.3.2. **Subsidies procedure.** A score of one is assigned when the subsidies are directed to service suppliers and are provided in non-transparent ways. The score improves as the process becomes more transparent and income compensations replace price compensations.
3. Regulatory and institutional development

3.1. Effective regulatory institutions

3.1.1. Management selection of competitive businesses. A score of one means that the management is appointed by state officials. The score increases when the management is elected by shareholders and reaches its maximum when the shareholders are private companies or individuals.

3.1.2. Independence of regulator, insulation from political influence. A score of one is assigned when a government department provides the service. The score increases as a state commission is introduced and an independent regulator is established. The highest score applies when an independent regulator acts according to law.

3.1.3. Transparency of regulation. A score of one implies an absence of legislation defining clear rules of the game for businesses, and the obligations of government bodies. The score increases with the development of legislation and its enforcement, including when the decision-making becomes public. The maximum score is reached when the performance of natural monopolies in an industry is regulated only by an independent regulator in accordance with law, and all decisions are disclosed.

3.2. Access regulation. A score of one means that the access right is arbitrarily determined by the state or the state-owned operator. The score increases as access is regulated by an independent regulator, later negotiated, and finally determined by market mechanisms.
Appendix 2
Explanations for the infrastructure indicator evaluations

RAILWAYS

1. Commercialisation and privatisation

1.1. Ownership

1.1.1. The basic rail network is 100% state owned. Rails linking enterprises to the basic network are owned by the enterprises. 2009: 1.3.

1.1.2. Passenger and freight transportation is 100% state owned. However, companies belonging to Belarusian Railways are separated and are independent legal entities. There are a number of private forwarding companies operating at the market. 2009: 1.3.

1.1.3. All ancillary businesses are state owned and constitute a part of Belarusian Railways, though they are divided into separated legal entities. Privatisation of some entities has been scheduled for 2010, thus allowing to increase the index from 1.3 to 1.7. 2009: 1.7.

1.2. Operation

1.2.1. Since May 2006 a natural monopoly Belarusian Railways is a department of Ministry of Transport and Communication. 2009: 1.3.

1.2.2. According to the statute of Belarusian Railways the primary objective is satisfying the needs of producers and of the population concerning transportation services. Achieving profitability is secondary to the primary objective. There is also a certain amount of state interference in the business and its investment decisions. 2009: 2.0.

1.2.3. There is private sector participation in service contracts. The tendering procedure is quite transparent including postings of announcements on the Internet. Nevertheless the scale of outsourcing has not yet reached satisfactory levels. 2009: 1.7.

1.3. Organisational structure

1.3.1. No separation of potentially competitive businesses from the natural monopoly operators has taken place so far. 2009: 1.0.

1.3.2. Ancillary businesses are independent legal entities within the structure of Belarusian Railways. The share of non-core businesses in the structure of Belarusian Railways is very high. They include 38 healthcare and education institutions. 2009: 1.3.

1.3.3. Belarusian Railways consist of 6 regional companies. Altogether the company unites 92 legal entities. 2009: 2.0.

2. Tariff reform

2.1. Structure of tariffs

2.1.1. Tariffs for domestic transportation services are set independently from the railways by the Ministry of Economy. Transit transportation tariffs are determined by international agreements. However, there is strong political influence on the tariff setting process, as they are believed to affect the standard of living in the country. 2009: 1.7.

2.1.2. According to law, tariffs should cover cost of the service provided and allow development of the railway network. As BR is both a natural monopoly operator and a transportation services provider it is impossible to assess the percentage of revenues channeled into railway network maintenance. Though, there is a considerable
amount of cross-subsidisation especially towards suburban transportation (diesel and electric trains): it is the most loss-making entity of BR (in 2008 revenues, excluding subsidies, covered only 35% of its costs, in 2009 this share should have fallen as average tariff for this service reduced by 3.2% yoy. Earlier, between 2001 and 2006 tariffs for suburban transportation grew faster than for other kinds of passenger and freight transportation, but this trend was put to an end in 2007. In 2008 and 2009 there was no tariff increase at all for suburban transportation, despite high inflation rates. There are also cross subsidies between domestic and international freight transportation, but they are rapidly decreasing. Domestic freight tariffs covered 92% of costs in 2009 (around 70% in previous years), which allows to increase the score from 1.7 to 2.0. 2009: 2.0.

2.1.3. Belarusian Railways consistently makes profits (the 2009 rate of return was 29.7%). Due to the distorted structure of tariffs, however, the amount of cross-subsidisation is still very high, as suburban and national passenger and national freight transportation suffer losses. 2009: 1.7.

2.2. Payments

2.2.1. A certain amount of indebtedness exists between the different enterprises within Belarusian Railways. 2009: 2.0.

2.2.2. Revenue collection for passenger transportation is 100%. Starting from December 20, 2007 concessionary tickets were abolished. Earlier a large percentage of consumers had privileges, especially on suburban transport: Privileged passengers constituted around 20% of all passengers transported. However, for the summer period concessionary tickets are still available for pensioners. Free rider practices on suburban transport is not widespread. Some firms that use freight transportation services are regularly indebted to Belarusian Railways. 2009: 2.3.

2.2.3. In practice the government covered only a slight margin of losses of Belarusian Railways caused by providing privileged consumers with service. 2009: 1.0.

2.3. State funding

2.3.1. Some consumer groups, especially users of suburban and intercity trains, are subsidized at the expense of enterprises that ship their goods by railway. Coverage of losses resulting from the provision of services at low tariffs by the state is marginal. 2009: 1.0.

2.3.2. According to law the government is obliged to cover all railway expenses, which are incurred as a result of providing privileges to certain categories of consumers. In practice the procedure of price compensation is not disclosed. 2009: 1.0.

3. Regulatory and institutional development

3.1. Effective regulatory institutions

3.1.1. The CEO of Belarusian Railways is appointed directly by the President. His deputies are appointed by the Council of Ministers. 2009: 1.3.

3.1.2. Since 2006 Belarusian Railways is a department of Ministry of Transport and Communication holding the rights of a legal entity. Thus, the practice of administrative intervention in particular activities of the company is legitimised. 2009: 1.3.

3.1.3. The rules for operating Belarusian Railways are clearly defined in a number of legislative documents. Yet the decision-making procedures have not been made open to the public. 2009: 1.7.

ROADS

1. Commercialisation and privatisation

1.1. Ownership

1.1.1. Roads are 100% in state and communal ownership. 2009: 1.0.

1.1.2. State transportation enterprises are separated into independent legal entities, each of which operates in a certain region. Private urban transportation was highly developed in some towns, reaching 50% market share. Since edict 760 came into force this figure has dropped significantly, leading to the deterioration of the index. Private freight transportation enterprises and individual entrepreneurs provide about 80% of the total amount of services. 2009: 1.3.

1.1.3. Ancillary businesses are state owned. All of them are independent legal entities separated from road management and approximately 23% are incorporated. 2009: 1.7.

1.2. Operation

1.2.1. The natural monopoly operator Belavtodor operates as a government agency, i.e. as part of the Ministry of Transport and Communications. 2009: 1.3.

1.2.2. There is political interference in the business and investment decisions of state owned firms by state administrations including local offices. 2009: 1.3.

1.2.3. Road construction and maintenance is provided by state owned firms, 23% of which are incorporated. There is private sector participation in service contracts through tenders. Yet the scale of outsourcing has not reached satisfactory levels. 2009: 1.7.

1.3. Organisational structure

1.3.1. Road management is completely separated from freight and passenger transportation services. 2009: 3.0.

1.3.2. Road construction and maintenance are separated from the natural monopoly operators. Cooperation between them is based on tendering procedures. 2009: 2.0.

1.3.3. The natural monopoly operators are divided into regional monopolies, although these monopolies are heavily regulated by the central and local administrations. 2009: 1.7.

2. Tariff reform

2.1. Structure of tariffs

2.1.1. Although tariffs are politically determined, state owned firms have some freedom in setting their own tariffs. This happens in towns where competition with private contractors is stronger and the tariffs charged by state owned firms are lower. Investment decisions are highly influenced by the state administrations. 2009: 2.0.

2.1.2. According to state legislation, road funding should derive from different tax payments, such as the tax on fuel, export duties and others. Earlier the greatest contributor to the fund was a special turnover tax, applied to the price of all products, but it was abolished in 2008. Also, user fees levied on truck companies depending on the distance travelled and the truck’s parameters, are accumulated in the fund. There is one state owned toll road (M1/E30 Brest – Minsk – Russian Federation border), but revenues do not cover operational costs on this road. 2009: 2.0.

2.1.3. The trucking and bus transportation markets are competitive, though competition in the urban transportation market is limited by excessively strict permit requirements. Tariffs on passenger transportation services of state-owned enterprises are set by the Ministry of Economy, although the enterprises have some freedom to
change them. The maximum tariffs for private passenger transportation are set by oblast councils. Private freight transportation companies are free to set their own tariffs. 2009: 1.7.

2.2. **Payments**

2.2.1. A certain, but not a significantly large amount of indebtedness between ancillary services providers persists. 2009: 2.3.

2.2.2. Revenue collection for passenger transportation is close to 100%, though price compensation for serving privileged passengers remains an issue. However, starting from December 20, 2007 privileges for a wide range of passengers were abolished. Free rider practices in urban transport are common. The revenues of public transport enterprises relative to their costs continue to be low. The indicator remained unchanged. 2009: 2.3.

2.2.3. State financing of road construction and repair in 2009 has not improved. The revenues of the Road Fund have fallen by further 0.1% of GDP. Besides, expenditures on agricultural issues constituted around 20% of the fund. However, the index has not been changed, as the absence of progress can be attributed to the external factor of the global economic crisis. 2009: 1.7.

2.3. **State funding**

2.3.1. The government used the cost-plus approach to cover loses of public transport firms instead of compensating them for the cost of providing services to privileged consumers, which would be in accordance with the law. State subsidies did not fully cover costs of public transportation companies: The whole transport industry suffered losses of 4.8%. In many cases the prices charged by private firms resemble those of their public competitors (price discrimination). Indicator remained unchanged. 2009: 1.3.

2.3.2. Subsidies are directed straight to the service providers in a non-transparent way. 2009: 1.3.

3. **Regulatory and institutional development**

3.1. **Effective regulatory institutions**

3.1.1. Management of all state owned companies is appointed by the state administrations, either central or local. 2009: 2.0.

3.1.2. Belavtodor, the monopoly road operator is a department of the Ministry of Transport. Road maintenance companies and transportation companies are separate legal entities. 2009: 1.7.

3.1.3. There are clear rules of operation for the natural monopoly described in legislative acts. However, the decision making process is not disclosed to the public. Decisions are highly politically influenced. 2009: 1.7.

3.2. **Access regulation:** Access is regulated by licensing. At the local level route tendering procedures are not transparent. The rules of sharing out routes among various contractors are not clearly defined and public control is lacking. The regulatory framework continued to be unfavourable for urban transportation firms and entrepreneurs during 2009. Compared with public firms they receive unequal treatment and continue to feel shock of the new legislation on individual entrepreneurs. As a result, the market share of private providers of passenger transportation services further decreased (from 4.7% in 2008 to 3.8% in 2009). Attempts to soften the tax burden on the economy provided some benefits for passenger and freight transportation firms. So the indicator remained unchanged. 2009: 2.0.
TELECOMMUNICATIONS

1. Commercialisation and Privatisation

1.1. Ownership

1.1.1. The cable infrastructure is primarily owned by Beltelecom, it further extents fibre-optic networks to the regions, thus providing better access to infrastructure both for population and other providers. Still, the structure remains monopolistic. The indicator does not change. 2009: 1.7.

1.1.2. Regional telecommunication enterprises are branches of Beltelecom. Internet providers are privately owned (except Beltelecom), some of which have a state share, and competing with each other. Most mobile phone operators are privatized. The indicator is the same in 2009: 2.3.

1.1.3. Some construction, infrastructure maintenance and other ancillary enterprises are state owned, others are private. Beltelecom is solely responsible for the maintenance of its networks. The indicator does not change. 2009: 2.0.

1.2. Operation

1.2.1. Beltelecom is an independent financial unit, but the Ministry of Communication and Informatisation regulates the activities of Beltelecom. The indicator does not change. 2009: 1.3.

1.2.2. Officially, Beltelecom’s long-term target is increasing its earnings and profitability. In reality, investment decisions are made upon approval of the Ministry of Communication and Informatisation. Participation in the socially oriented governmental policies in the sphere of telecommunications is obligatory for Beltelecom. The indicator does not change. 2009: 1.7.

1.2.3. The mobile phone networks were developed by private operators. Private sector participates in service contracts and equipment supply by means of tenders. The indicator does not change. 2009: 2.0.

1.3. Organisational structure

1.3.1. Beltelecom controls international traffic transfer. Beltelecom provides local and international connections. Beltelecom is the only primary internet provider, while secondary internet providers are mainly private companies that compete with Beltelecom. Beltelecom strengthens its positions in the internet provision segment; competition with the state monopoly remains intense. Mobile communication services are provided by mixed ownership or private operators. The indicator does not change. 2009: 2.3.

1.3.2. Ancillary businesses are independent legal entities. Cooperation between them and Beltelecom is based on tendering procedures, some of which are announced via the Beltelecom website. The indicator does not change. 2009: 2.3.

1.3.3. Regional companies remain integrated into Beltelecom. Local and international phone connections are centralized. There are no competing regional operators in telecommunications. The indicator does not change. 2009: 1.3.

2. Tariff reform

2.1. Structure of tariffs

2.1.1. Beltelecom’s tariff policy remains under strong political influence. It is determined by the state policy priorities. Tariffs for local phone calls are set by the Ministry of Economy. Rates for international phone calls and charges for fixed network customer
connections to the mobile networks are set by Beltelecom. Internet tariffs and prices for mobile communications are set by providers. The indicator does not change. 2009: 2.7.

2.1.2. Local calls are subsidized by international calls. The indicator does not change. 2009: 2.3.

2.1.3. Mobile and internet providers’ charges are competitive and cover costs. Charges for internet services are constantly decreasing. The indicator does not change. 2009: 3.7.

2.2. Payments

2.2.1. Payments within the sector are regular. A certain level of indebtedness still persists in telecommunications, however it is decreasing. The indicator does not change. 2009: 3.3.

2.2.2. Households cover the tariffs for landline communications charged by Beltelecom. In the case of non-payment they are disconnected. The arrears of legal entities are not significant and falling. The indicator does not change. 2009: 3.3.

2.2.3. The indebtedness level is low. The indicator does not change. 2009: 3.3.

2.3. State funding

2.3.1. The below-cost tariffs for local phone calls and the provision of other services to privileged customers are covered by profits generated by other Beltelecom activities (e.g., international connections and internet). Some debt restructuring has taken place in the sector. The indicator does not change. 2009: 2.7.

2.3.2. Cross-subsidisation remains. Direct state subsidies are not significant and primarily aid the building of new telecommunications networks and improving the access to telecommunication services in rural areas. The indicator does not change. 2009: 1.3.

3. Regulatory and institutional development

3.1. Effective regulatory institutions

3.1.1. The top management of Beltelecom is appointed by the Ministry of Communication and Informatisation. The managements of the mobile phone operators and the internet providers are selected by their shareholders. The indicator does not change. 2009: 2.0.

3.1.2. Beltelecom is a state enterprise. The telecommunications’ sector activities are regulated and controlled by the Ministry of Communication and Informatisation. Mobile phone operators are not subordinated to the Ministry of Communication and Informatisation, but the state (represented by Beltelecom) being the majority shareholder in one of them influences the decision-making. The indicator does not change. 2009: 1.3.

3.1.3. The rules of the sector operation are determined by the legal acts. Administrative regulation is strong. The decision-making process is not open to the public scrutiny and is influenced by the government policies. The indicator does not change. 2009: 1.3.

3.2. Access regulation. Access is provided through tender allocation and operations licensing. The decisions made are not always transparent. The indicator does not change. 2009: 1.7.
GAS

1. Commercialisation and privatisation

1.1. Ownership

1.1.1. Gazprom acquired the next 12.5% of the shares of Beltransgaz (having acquired 37.5% in 2009). The remaining shares of Beltransgaz belong to the state. The indicator increased from 2.3 in 2008 to 2.7 in 2009.

1.1.2. Transportation and distribution of gas are unbundled. 11 enterprises which belong to Beltopgaz (mainly mining peat) were corporatized, however 1005 of shares still belong to the state. The indicator increased from 1.3 in 2008 to 1.7 in 2009.

1.1.3. Construction, infrastructure maintenance and other ancillary enterprises are mostly state owned and/or are controlled by the state concerns. 2009: 1.3.

1.2. Operation

1.2.1. The Ministry of Energy regulates activities of Beltransgaz and Beltopgaz regional organisations (Oblgaz), but the enterprises function as independent financial units. 2009: 1.3.

1.2.2. Commercial goals are weak. Political influence on management and investment decisions prevail. 2009: 1.7.

1.2.3. The role of private sector in providing service for the gas sector is minor. 2009: 2.3.

1.3. Organisational structure

1.3.1. Gas transportation is separated from distribution and sales. The concern Beltopgaz deals with transportation and sales of gas to consumers. 2009: 1.7.

1.3.2. The enterprises that provide supporting services (delivery, installation) are separated economically and organisationally. 2009: 2.0.

2. Tariff reform

2.1. Structure of tariffs

2.1.1. Price and tariff setting is still subject to strong political influence, and determined by state priorities in economic development. Economic activities are separated from regulatory functions. All important prices and tariffs are set by the Ministry of Economy. This ministry performs some functions of the regulatory body. 2009: 2.0.

2.1.2. Beltransgaz prices cover average costs. 2009: 2.3.

2.1.3. Overall revenues of enterprises that make up Beltopgaz cover costs. In general the system of price formation is based on the cost plus method. Gas prices for domestic consumers do not depend on the distance of gas delivery. There is cross subsidisation of households by industry. 2009: 2.3.

2.2. Payments

2.2.1. In 2009, debts were reduced and the share of cash payments maintained at a high level. 2009: 3.3.

2.2.2. Enterprises, especially in the industrial sector improved their gas payments. Nevertheless overdue debts of various consumers remain. 2009: 3.3.

2.2.3. Budget debts are low and they do not exceed the level of payment for monthly gas consumption. 2009: 3.3.
2.3. **State funding**

2.3.1. Some categories of consumers buy gas at preferential prices. In 2009 debt write-off were not practiced and the amount of state funding was reduced. 2009: 2.7.

2.3.2. The procedure of granting subsidies lacks transparency and it does not target individual consumers. However, one-time subsidies were not given. 2009: 2.7.

3. **Regulatory and institutional development**

3.1. **Effective regulatory institutions**

3.1.1. The top management of Beltransgaz and enterprises of Beltopgaz are appointed by the Ministry of Energy subject to approval by the President. 2009: 1.0.

3.1.2. The Ministry of Economy performs some regulatory functions in the sector. 2009: 1.0.

3.1.3. Administrative regulation is strong not only in management and decision making, but also in contract performance both of suppliers and consumers. There is no specific legislation that regulates the sector. 2009: 1.0.

3.2. **Access regulation.** In 2004 in order to increase openness and transparency in the sector, the tariff for gas transportation via the Beltransgaz pipeline was introduced. Furthermore, network access to the low-pressure network of Beltopgaz by third parties was established. However, despite considerable improvements in access regulation there are still numerous administrative barriers for third parties access. 2009: 2.0.

**ELECTRICITY**

1. **Commercialisation and privatisation**

1.1. **Ownership**

1.1.1. The enterprises of Belenergo are mainly 100% state property. 2009: 1.3.

1.1.2. Generation, transportation and distribution of electric power are not unbundled and are mainly carried out by mostly state owned enterprises. 2009: 1.0.

1.1.3. Construction, infrastructure maintenance and other ancillary enterprises are mostly state owned and/or are controlled by the state concern. 2009: 1.3.

1.2. **Operation**

1.2.1. Ministry of Energy regulates the activities of the Belenergo enterprises, but the enterprises function as independent financial units. 2009:1.3.

1.2.2. Commercial goals are weak. Political influence on management and investment decisions is prevalent. 2009: 1.7.

1.2.3. Construction and infrastructure maintenance are provided not only by the enterprises of Belenergo, some of which are private. 2009: 2.3.

1.3. **Organisational Structure**

1.3.1. There is no separation between production, distribution and sales. 2009: 1.0.

1.3.2. The enterprises that provide supporting services (delivery, installation) are separated economically and organisationally, some of them are parts of the concern. 2009: 2.0.
2. Tariff reform

2.1. Structure of Tariffs

2.1.1. The tariff setting is still strongly politically influenced. The Ministry of Economy sets all important prices and tariffs. Economic activities are separated from regulatory functions, some of which the Ministry of Economy is responsible for. 2009: 2.0.

2.1.2. Prices cover the average costs of Belenergo. However, cross subsidisation of heating by electricity still takes place. 2009: 2.3.

2.1.3. Overall revenues cover Belenergo’s costs. In general, the system of price setting is based on the cost plus method. Electricity prices for domestic consumers do not depend on the distance of electricity transmission. In 2009, prices for some consumer groups remained below costs and the cross subsidisation was even increased. The indicator went down from 2.3 in 2008 to 2.0 in 2009.

2.2. Payments

2.2.1. Since 2004, debts inside the sector were gradually reduced and the share of non-cash payments among enterprises of the sector was practically liquidated. 2009: 3.3.

2.2.2. The level of payments, especially among industrial enterprises, increased. In 2009 they paid fully for current electricity consumption. Nevertheless debts stemming from the past of various consumers remain. 2009: 3.3.

2.2.3. Budget debts are low and they do not exceed the average level of payment for monthly electricity consumption. 2009: 3.3.

2.3. State funding

2.3.1. Some categories of consumers buy electricity at preferential prices. New debts are restructured. In 2009 no debt write-off was practiced. 2009: 2.7.

2.3.2. The procedure of granting subsidies lacks transparency and it does not target individual consumers. One-time subsidies were not given. 2009: 2.7.

3. Regulatory and institutional development

3.1. Effective regulatory institutions

3.1.1. Top management of the enterprises of Belenergo are appointed by the Ministry of Energy subject to approval by the President. 2009: 1.0.

3.1.2. Only household tariffs are set externally from Belenergo (by the Council of Ministries). Belenergo declares tariffs to the Ministry of Economy. Belenergo is managed by the Ministry of Energy. 2009: 1.0.

3.1.3. Administrative regulation is strong not just in management and decision making, but also in the contract performance both of suppliers and consumers. There is no specific legislation that regulates the sector. 2009: 1.0.

3.2. Access regulation to the power lines network is provided by Belenergo, nevertheless it is not closed. 2009: 1.0.
### Appendix 3

**Infrastructure Indicators Evaluation**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Railway</th>
<th>Roads</th>
<th>Telecommunications</th>
<th>Gas</th>
<th>Power</th>
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**About the project**

The joint project of the German Economic Team in Belarus and the IPM Research Center was launched in May 2003 with support of the Ministry of Economy (Germany) under the TRANSFORM program. The main objective of the project is to support the Belarusian government in the field of economic policy. To achieve this, the team of experts regularly prepares analytical papers on different topical issues and presents recommendations to the officials from the National Bank, the Ministry of Finance, the Ministry of Economy, the Ministry of Foreign Affairs and other institutions involved in the process of formation and implementation of economic policy.

**Activities**

- Regular analysis of the economy of Belarus;
- Monitoring of main sectors of the economy;
- Promotion of professional dialogue between Belarusian and German experts on important issues for the economic development of Belarus.

**Team**

**German Economic Team in Belarus**

- Prof. Dr. Stephan von Cramon-Taubadel, agriculture and real sector, co-leader
- Dr. Ricardo Giucci, macroeconomy and financial sector, co-leader
- Robert Kirchner, macroeconomy and financial sector, consultant
- Dr. Georg Zachmann, energy economics and econometrics, consultant

**IPM Research Center**

- Dr. Igor Pelipas, monetary economics and applied econometrics, Director of the IPM Research Center
- Dr. Irina Tochitskaya, international economics, Deputy Director of the Research Center
- Dr. Elena Rakova, energy sector, structural and competition policy, enterprise reform
- Alexander Chubrik, M.A. in Economics, economic growth and monetary policy
- Dzmitry Kruk, M.A. in Economics, banking sector and macroeconomic modelling
- Anastasiya Glambotskaya, M.A. in Economics, M.A. in International Political Economy, international economics, entrepreneurship, telecommunications
- Gleb Shymanovich, M.A. in Economics, transport sector and public finance
Analytical materials
Current research products and publications of the project group are available via the Internet (http://research.by/get).

Belarusian Monthly Economic Review (BMER)
A monthly bulletin has been published since October 2002. It provides readers with recent news on politics and economics, covering such sectors of the economy as the real sector, structural trends, the external sector, public finance, monetary policy and the banking sector.

Policy Papers
Analytical materials on specific economic issues providing policy recommendations for the government and other organisations involved in the process of creating and implementing economic policy.

PP/01/08 Pension System in Belarus: Major Challenges and the Ways of Meeting Them
PP/02/08 The competitiveness of Belarusian agriculture
PP/03/08 The International Financial Crisis and Belarus: Risks and Policy Implications
PP/04/08 The case for tariff differentiation in the Belarusian electricity sector
PP/05/08 Restructuring the Belarusian Electricity Sector: Setting the Agenda
PP/06/08 Reinsurance Practices in Belarus: Barriers to Insurance Sector Development and Investments Limitation
PP/07/08 Impact of FDI on Trade and Technology Transfer in Belarus: Empirical Evidence and Policy Implications
PP/08/08 Recent Developments and Impact of the International Financial Crisis on Belarus
PP/02/09 Privatisation in Belarus during the Global Financial Crisis: No time to Lose
PP/03/09 The Belarusian Electricity Sector: Financing Sources for Investments
PP/04/09 Perspectives and Challenges for Economic Policy in Belarus during the Global Crisis: Evidence from Macroeconometric Modelling
PP/05/09 Policy Measures to Attract FDI: An Overview of International Experience and Recommendations for Belarus
PP/06/09 Official Reserve Adequacy in Belarus: Analysis and Recommendations
PP/07/09 Perspectives for Fiscal Policy and Budget Deficit Financing in Belarus
PP/08/09 Eastern Partnership: Prospects for Intensifying the Belarus – EU Relations in the Energy Sector?

Belarus Infrastructure Monitoring
Monitoring of the current situation and the perspectives for the development of the energy, telecommunications and transport sectors in Belarus. The following sectors are monitored: electricity, gas, communication and communication services, railways and roads.