

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 2010.

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
thsd	thousand
toe	tonne of oil equivalent
trn	trillion
USD	United States Dollar
yoy	year-on-year



Table of Contents

Foreword	5
1. Summary	6
2. Privatisation in Belarus: Improving the Implementation Framework	8
2.1. Introduction	8
2.2. Overview of recent privatisation record	8
2.3. Implementation obstacles for privatisation transactions	10
2.4. Policy recommendations for improving the implementation framework	12
3. Belarusian Infrastructure Policies in 2010	15
3.1. Railways	16
3.2. Roads	19
3.4. Gas	27
3.5 Electricity	30
Appendix 1	33
Appendix 2	36
Appendix 3	45



Foreword

This is the eighth 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.¹ 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 reflects 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 obstacles for conducting privatisation deals in Belarus and provides recommendations for improving the privatization framework. This is an important issue as privatisation came to a standstill in 2010. 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.

¹ See www.ier.kiev.ua.

1. Summary

During the year 2010, like in previous years, infrastructure industries did not see any substantial structural changes. Apart of the abolishment of some license requirements the regulatory framework in the railway and road sectors remained unchanged. Despite announced plans no railway assets were privatised. The regulatory framework in the telecommunications sector remained unchanged, but concerns over increased public control in the sector are being raised. The situation in the natural gas and electricity sector did not differ from 2009.

The **railway sector's** index did not change in 2010, remaining at 1.4. In 2010, no changes in the ownership, structure, operation and state financing of Belarusian Railways occurred. The railway operator Belarusian Railways (BR) preserved its monopoly. Despite active discussions of the necessity to reorganize Belarusian Railways, transferring social infrastructure to local administrations and privatizing non-core lines of business, no substantial reforms were carried out. A significant problem is the cross-subsidisation between freight and local passenger transportation. Cost coverage for latter fell to 20.4% as there was no tariff growth for the third consecutive year. One improvement in 2010 was a growth of tariffs for local freight transportation that eliminated the need for the cross-subsidisation of local freight transportation.

The **road sector's** index has not changed either, indicating the absence of any significant reforms or changes in the sector. The most negative development observed within the sector is the continued reduction of the financing for road construction and maintenance which results in longer time between major road reparation works and thus decreasing road quality. The abolishment of licenses for some types of freight transportation resulted in the increase of the regulatory and institutional development subindex from 1.9 to 2.1.

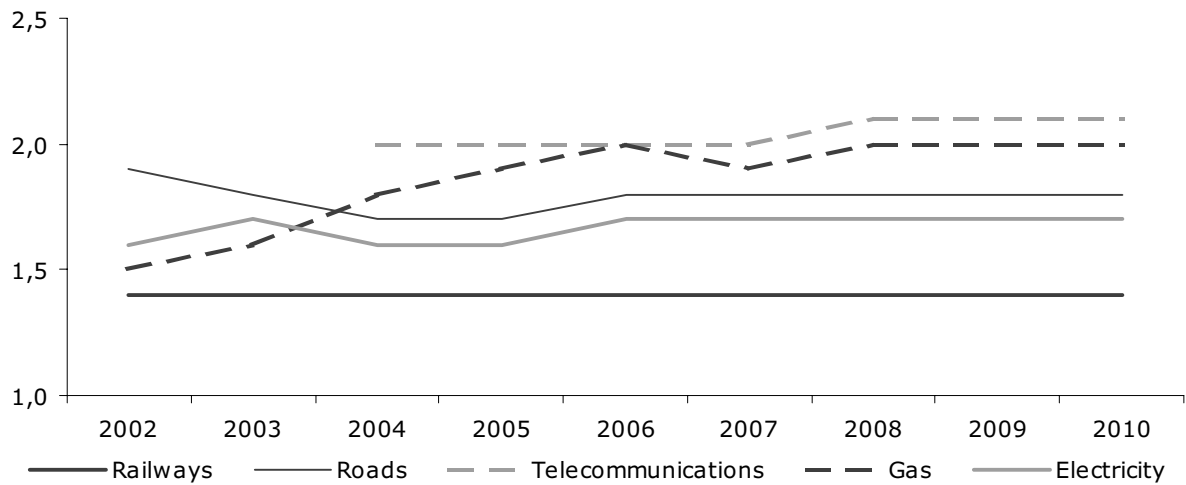
The **telecommunications'** index remained at 2.1 in 2010. There were no significant changes in the sector's regulatory environment because the government postponed changes to the law "On Telecommunications". However, new concerns regarding the states oversight of the telecommunication sector were raised in 2010. Even though several decrees were adopted during the year, according to which the industry's control is transferred to the National Traffic Exchange Center (NCOT) under presidential administration, Beltelecom still remains the monopolistic provider of the majority of telecommunication services (excluding mobile connections) and the regulator of most services. Some developments in 2010 were primarily associated with an increased competition for customers in the mobile connections and internet access segment. 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 2010 there were no considerable structural reforms implemented in the **gas sector**. As planned, Gazprom acquired another 12.5% of Beltransgaz shares, and now has the targeted 50% stake in the company. Household gas tariffs remained below cost and industrial tariffs. Consumers' gas debt arrays have grown because of higher gas prices, continuing to restrict investments in asset modernisation. These minor changes, however, had no impact on the IPM gas sector reform index in 2010, that thus remains at a level of 2.0.

No significant changes were implemented in the **electricity sector** in 2010. Despite still low natural gas prices in comparison with other European countries and increasing tariffs cash-flows of Belenergo remained insufficient to finance necessary investments. Cross-subsidisation continued to be an important issue. In general, due to the lack of essential changes, the index remained at the level of the previous years: 1.7.

The absence of significant changes in the indicators clearly shows that no significant reforms were implemented in the Belarusian infrastructure sector in the past nine years. This standstill at a low level is becoming an ever more pressing issue in a region where other countries are moving fast ahead (e.g., Georgia). In its current economic situation, Belarus can no more afford an inefficient use of the existing infrastructure. And in times of highly stretched government budgets, only bold reforms of the management of infrastructure might prevent the physical degradation of the infrastructure that at some point will challenge the long-term economic growth prospects of the country.

Figure 1:
IPM Research Center’s infrastructure reform indices for Belarus



Source: Own calculations.

2. Privatisation in Belarus: Improving the Implementation Framework²

2.1. Introduction

After noticeable progress in 2007, the process of privatisation came to a standstill at the end of 2008, with only a few exceptions. This standstill is highly problematic, since privatisation is a pre-requisite for the necessary restructuring and modernisation of the Belarusian economy, which is still widely dominated by state conglomerates.

Without doubt, the arrival of the global financial and economic crisis to Belarus played an important role for the lack of progress. During the crisis, the appetite of companies for new acquisitions as well as the readiness of banks to finance new deals decreased dramatically. But in our view, also domestic factors are partly responsible for the standstill. While the macroeconomic response to the economic crisis, consisting mainly in a restrictive fiscal policy and the devaluation and flexibilisation of the Belarusian Ruble, was highly appropriate and successful, the policy reaction regarding privatisation was less appropriate. The unwillingness of the authorities to sell companies “under value” is highly questionable, since the inflated prices of 2007/2008 will certainly not come back for many years and should thus not be used as a benchmark. Furthermore, the highly appropriate instrument of pre-privatisation³ has not been used so far. Consequently, as we extensively explained in a recent policy paper³, also the inadequate privatisation strategy pursued the authorities is to blame for the lack of progress.

But also a further domestic factor seems to be responsible for the low number of privatisation deals. There is evidence, as shown by complaints from foreign companies, that the actual implementation framework regarding privatisation is far from being perfect, thus preventing substantial progress. The relevant conditionality in the recently expired IMF stand-by programme regarding the establishment of a privatisation agency, the adoption of a privatisation law and the transparent execution of a number of privatisation deals seems to support these observations.

This section tries to address these implementation issues. Specifically, it provides answers to the most pressing questions policy makers currently face in this field: What are the necessary steps to be taken by the authorities to remove existing obstacles? How should the framework be changed to achieve a transparent, competitive and professionally executed privatisation process?

2.2. Overview of recent privatisation record

2007

The year 2007 can be considered a major turning point in the attitude of the authorities towards privatisation. Faced with a number of external challenges, policymakers pursued a policy of selective privatisation that was targeted at attracting foreign currency inflows, necessary to finance the growing current account deficit. This was accompanied by a clear change in the rhetoric of the authorities, who made privatisation an important goal of economic policy.

As a result, a sudden increase in privatisation deals and revenues took place. While in 2006 total revenue from such transactions amounted to a mere USD 0.03 m, the corresponding

² This chapter is a reprint of the IPM Policy Paper: Kirchner, R., Giucci, R., Skriba A. (2010). Privatisation in Belarus: Improving the Implementation Framework, *IPM – GET Policy paper* PP/08/09.

³ See *IPM – GET Policy Paper* PP/02/2009 “Privatisation in Belarus during the Global Financial Crisis: No Time to Lose”.

number for 2007 was USD 1.2 bn. Furthermore, the foundation for significant further privatisation revenues arriving in the following years was achieved through the sale of 50% of shares of "Beltransgaz" to Russian "Gazprom" for USD 2.5 bn. This deal was structured in a way that payments of USD 625 m are to be made every year between 2007 and 2010 (in total USD 2.5 bn)

As a result, while in 2007 no privatisation of large Belarusian enterprises on a massive scale took place, this year must be considered a very promising start.

2008

The beginning of 2008 saw a continuation of the newly gained momentum in privatization. A three-year plan of privatization of state property for 2008–2010 was adopted⁴ in 2008. It assumes the corporatisation⁵ of 519 enterprises and the following privatisation of 147. However, while in 2008 the corporatisation of 158 enterprises occurred, the shares of only two (!) of them were finally sold.

This apparent difference between plan and execution can be blamed partly on the arrival of the global financial crisis, which put naturally a brake on many transactions in the wider region. At the same time, the government showed clear signs of being unwilling to sell state enterprises at lower prices than were achieved before the crisis. Lowering their price demands in response to the crisis and the drop in valuations did not suit the Belarusian authorities. As a result, few noticeable transactions took place, and the privatization proceeds amounted to USD 0.9 bn for the year 2008, which is significantly less than the amount in the previous year. Excluding the annual payment of USD 625 m for the sale of Beltransgaz agreed in the previous year, the only major transaction that took place was the sale of the mobile operator "BeST" for USD 266 m⁶.

2009

The standstill in the process of privatization continued in 2009, as the authorities refrained from selling major assets, despite significant external pressure. This pressure came mainly from two directions, and for different reasons: While Russian companies were interested to gain access to strategic sectors of the country, the loan agreements with the IMF and the World Bank included relevant conditionality in terms of laying the foundations for a broad-based privatisation programme.

Privatisation proceeds in 2009 amounted to USD 1 bn, a roughly similar figure to the previous year. But once again, one must keep in mind that this amount includes the USD 625 m tranche for Beltransgaz due in that year. At the same time, a new trend appeared at the end of the year– the possibility of lower price demands for specific assets to be sold. Despite repeated statements by the authorities to sell BPS-Bank for USD 500 m, this deal brought only USD 280 m, which shows increased flexibility from the side of the state.

2010

In 2010, Belarusian authorities declared their plans to earn about USD 1 bn from privatisation deals from foreign investors, i.e. a figure similar to the disappointing 2009 results when

⁴ Presidential Decree No 7 from 14 April 2008.

⁵ Corporatisation refers to the legal transformation of state-owned unitary enterprises into "Joint-Stock Companies" (JSC). The state remains the sole owner of the enterprise after the change in its legal form; however, this might be considered a first necessary step in the process of (material) privatisation.

⁶ The final price for the sale of 80% of the shares of "BeST" was actually USD 500 m. However, the company had a credit debt outstanding to China that amounted to USD 234 m. Due to the changes in legislation, payment for this credit was included in the final price of the BeST sale. Therefore, the amount actually received for 80% of BeST shares was only USD 266 m.

accounting for the Beltransgaz deal. As of now, the only major transaction that took already place was indeed the payment of the last tranche for Beltransgaz (USD 625 m).

The main declared reason for the privatisation of some public enterprises -apart from the obvious needs for covering the current account deficit- is the intention to cover the budget deficit, which could reach nearly USD 900 m this year according to forecasts (1.5% of GDP). Currently, about 118 enterprises are in the process of corporatisation, according to the State Property Fund of Belarus. At the same time, the declared objectives for 2010 should be taken with a certain degree of caution, as the government can introduce adjustments to the privatisation process at any time. Reluctance of the authorities to increase the public debt further or new negative shocks regarding the conditions of Russian oil and gas imports may actually intensify the processes of selling strategic companies to (foreign) investors. If the currently optimistic expectations of the government on improvements in the external trade conditions in major export markets of the country do not materialise, foreign investors probably will be offered a larger number of enterprises on more favorable terms. However, in February 2010 the President made it clear once again he considers selling further state property only as a last resort and only at a very high price. Thus, the standstill observed in the previous year seems to continue.

Assessment: The rapid increase in privatisation activity during 2007-2008 in comparison to the previous years came to a sudden standstill with the arrival of the global financial crisis to Belarus. Since the end of 2008, the process of privatisation is basically put on hold, and only very few new deals are agreed. It is crucial for the authorities to bring new momentum to the process.

2.3. Implementation obstacles for privatisation transactions

The key implication from the last chapter is how the privatisation process can be revived. One direct recommendation is that a fundamental change in strategy is needed, i.e. the authorities must rethink their policy to insist on inflated, pre-crisis asset prices and use the instrument of pre-privatisation more actively. We have dealt with these issues in our previous policy paper.

At the same time, the removal of implementation obstacles is of crucial importance. The current framework for carrying out privatisation deals is highly problematic and in many cases prevents the conclusion of successful transactions deals, as experienced by a number of interest companies from abroad. While the "boom" years of 2007 and partly 2008 were to some extent hiding these underlying weaknesses, they appear during times of crisis in full force.

In the following sections, we identify 4 key obstacles for the implementation of a broad-based, fair, transparent and professionally executed privatisation process in Belarus.

1) Institutional aspects

Institutional aspects can be broken down in two different, but interrelated problems:

The first problem deals with the current multiplicity of counterparts for potential buyers. Interested potential investors are usually surprised by the number of different state institutions and counterparts in charge of privatisation and the apparent lack of clear distribution of competencies and coordination between them. Examples of such institutions are the State Property Fund, the Presidential Administration, the respective Ministry, concerns, regional and local governments, the employees and the management. The resulting effect on potential investors is often a state of confusion as there is usually no clarity on whether commitments from counterpart 1 are also valid in negotiations with counterpart 2 and so on. Furthermore, talking to these institutions costs a lot of time and money, and thus raises transaction costs.

A second problem relates to the extremely limited competences for the institution formally in charge of privatisation, namely the State Property Fund. In particular, the lack of competences for taking final decisions, even for very small deals (the limit is currently USD 116,000) is worrisome. As far as bigger transactions are concerned, under current legislation, the decision to sell state property which cost more than USD 116,000 (10,000 basic units) shall be taken only after consultation with the Presidential Administration. For investors, the result often is that after long talks with the formally responsible partner, a new institution (Presidential Administration) enters the negotiations, and a situation as described above (several counterparties, delays, contradictions) develops.

2) Lack of professional experience

Due to the lack of progress in the implementation of broad-based privatisation in the past, the circle of experienced government officials is naturally very small. Since the relevant state institutions have relatively little competencies, this is a negative factor for attracting qualified people and institutional capacity building in general. This implies there are relatively few competent counterparts for foreign investors available, which are able to deal with such complex transactions according to best international practices.

3) Valuation framework

Another reason for the lack in progress in privatisation is the frequent disagreement on the asset price between state and potential buyer. While a certain disagreement on the asset price between the authorities and investors is rather natural, given the different interests of both parties, this should not be due to different concepts of valuation. Specifically, the Belarusian authorities insist in their price negotiations on the application of valuation techniques that use the book-value⁷ of the assets, and do not take any forward-looking information into account. In fact, the book-value is considered a legal minimum price during negotiations. At the same time, investors who are interested in enterprises as a going-concern, are mainly interested on the expected future cash-flows of the enterprise, and base their price suggestions on this value, after adjusting for the risky operating framework in Belarus.

In general, using the book value as a proxy or at least as a lower bound for the market value (i.e. showing the liquidation value of the company) can be justified for broad orientation purposes, since book and market value can be indeed related. However, there are many cases where huge differences between the two concepts arise, especially when book values are grossly inflated and do not correspond to the ability of the company to generate future earnings and growth. Severe problems with local accounting and valuation standards in relation to international standards support the hypothesis that such differences are in Belarus the norm, rather than the exemption. Thus, it is highly questionable whether the book value as it is used today contains any relevant information for determining the market value of a company. Basing the price demand on it leads to a completely unrealistic price and as a result no deal takes place. Thus, this issue must be considered a major impediment for privatisation.

4) Further conditions for selling of state companies

According to information from state authorities, there is a list with 25 conditions which a potential buyer of a state enterprise has to fulfill. Among factors mentioned by state officials, this list includes the preservation of workplaces of the enterprise (no dismissals), sustention of social infrastructure and production volumes and certain investment volumes. These

⁷ Furthermore, it should be mentioned that the calculation of the book value of the assets follows Belarusian and not international accounting principles, which is a further drawback.

conditions – which are not publicly available in full detail – may scare off potential investors as they limit their freedom to develop the asset according to their own views.

Coupled with the problems discussed in section three, i.e. often unrealistic price demands from the side of the authorities, such additional strings attached to the sale are clearly negative for potential buyers and may explain their reluctance to invest in Belarus.

Conclusion: While a number of reasons for the standstill can be identified, underlying weaknesses in the process of privatisation implementation are important factors in this respect. Reforming these barriers is a pre-condition for the privatisation process to accelerate.

2.4. Policy recommendations for improving the implementation framework

Having identified the main obstacles that currently block a transparent, competitive and professionally executed privatisation process, we proceed by presenting the necessary steps to be taken to remove these obstacles. Our policy recommendations correspond closely to the impediments in chapter 3.

1) Establishment of a privatisation agency

The current situation with many counterparts and unclear responsibilities and competencies was identified as a major impediment. A major reform needs to start here by setting up a completely new institutional structure responsible for the privatisation process. We support current plans⁸ to proceed with the creation of an agency with clear mandate and competences, which serves as the main or even exclusive partner for potential investors. Specifically, we are in favor of plans that a new “Privatisation Agency” shall be the sole responsible institution that prepares enterprises for privatisation through an open, international, transparent and competitive bidding process. The Presidential Decree⁹ on the creation of the official institution “National Agency for Investments and Privatisation” was signed to intensify the process of privatisation. The decree states that the agency is created “to improve the work on attracting investments” and to “improve the effectiveness of the privatisation process”. However, while the legal framework is already in place, the agency is still not operational. The agency is based on the existing “National Investment Agency”, which works under the Ministry of Economy.

Such an agency must be able to interact effectively with other government bodies and facilitate the efficient and timely interaction between potential investors and state, including regional authorities (“one-stop shop”). Furthermore, it is of critical importance that its dual mandates (investment promotion and privatisation) are to be equally pursued, and no hierarchical ranking between them takes place, in the sense that the agency pursues mainly a policy of attracting (greenfield) investments rather than privatising state-owned enterprises.

For this to happen, the governance structure is of key importance. The agency will be accountable to the government and controlled by a supervisory board. This board will be chaired by the Prime Minister and consist of ten members of the Presidential Administration, the Ministry of Economy, the Ministry of Finance, the State Property Committee and other government bodies. Best international practice shows that a purely state-run agency is not the best form of governance, and independent representatives of the private sector should be included in the supervisory structure of the agency. These representatives (including international specialists) should have a good reputation and a deep knowledge of the

⁸ The foundation of such an institution was also a specific IMF programme commitment, as part of a wider plan to accelerate the privatisation process (structural benchmark).

⁹ On 25 May 2010, President Alexander Lukashenko issued Decree No 273 “On Establishing the National Investment and Privatization Agency State Institution”.

privatisation process. This helps to facilitate the monitoring, oversight, coordination and audit of the work of the agency.

A further important issue concerns the level of competences of the agency, specifically regarding the size of the privatisation deals to be concluded. As written in the previous chapter, a major problem with the institutions currently in charge relates to their extremely limited competencies in that respect. For the new agency to be successful, this limit must be considerably increased. Otherwise, apart from not making a material impact on the process of privatisation, this institution will also soon run into major trouble relating to internal capacity building. A low level of competences in terms of final decisions on individual deals implies a rather weak institution, which will hardly be able to attract able and well-qualified people.

Recommendation 1: We support the plans to establish a “National Agency for Investments and Privatisation”, but note that a number of issues need to be clarified. First, the supervisory structure of this agency must be structured in a way that guarantees the equal pursue of both declared objectives. In particular, independent private-sector representatives need to be included here. Second, the competences of this agency must be considerably increased in comparison to previous institutions. Third, the institution must be operational as soon as possible.

2) Involve more expert advice (including foreign advisors)

Privatisation negotiations are relatively complex issues, which involve a high degree of specialist knowledge. The currently observed lack of such knowledge in Belarusian state institutions makes the inclusion of qualified, experienced and reputable consultants from the private sector (banks, accounting and consulting firm, to name but a few) indispensable. This includes first and foremost foreign advisors, as the experiences of other, more advanced countries in this respect can be fully utilised. Such experts, selected on a competitive basis, are a vital support for state officials.

While it is clear that hiring experts from the market, especially foreign ones, is more expensive, we think this is well-invested money. First, it demonstrates a clear commitment by the government to give new impetus to the process. Second, a funding by external donors might be possible. Third, this contributes to internal capacity building, and over time the reliance on expert advice (especially foreign one) might be less needed. It is interesting to note that transition countries which started the process of privatisation quite early in the 1990ies are now a major source of advice to other, less advanced countries.

Recommendation 2: The current lack of “know how” in relevant state institutions must be mitigated by the increased reliance on experts from the private sector, including foreign ones. As time passes, internal institutional capacity building will grow and substitute for this factor.

3) Application of modern valuation techniques

While hard and lengthy negotiations between sellers and buyers of assets are rather the norm than the exemption in business transactions, this is usually done within a commonly accepted appraisal or valuation framework. This has the advantage that both parties agree on a conceptual level on key value drivers, whereas the differences relate only to different assumptions regarding specific factors.

A commonly applied valuation framework applied both in business and in privatisation deals determines the market value of an enterprise according to the “Discounted Cash-Flow Method” (DCF). The approach focuses on the expected future cash-flows that the enterprise is able to generate, and discounts this value back to the present day by the application of a discount rate, which represents the specific risks of the company. This approach is

fundamentally different from the book value of the company, as this carries mainly information on the potential liquidation value of the company.

The introduction of such modern techniques will decrease the likelihood of extremely unrealistic ask prices from the side of the state authorities, and increase thus the probability of a successful conclusion of a transaction. While we admit that the full implementation of such methods will take time, and involve a lot of training, the authorities should in parallel also reform the valuation methods currently in place based on book value. Here, a calculation of the book value based on international standards would be a first step.

Recommendation 3: The application of modern benchmark valuation techniques like the “Discounted Cash-Flow Method” (DCF) will decrease the likelihood of extremely unrealistic ask prices from the side of the state authorities, and thus contribute to a more successful conclusions of a transactions.

4) Reform the framework of further sale conditions

While it is a usual procedure to agree with investors on certain conditions apart from the price, this must be done in a way that balances the interests of the state with that of the new potential owner, which is currently not the case. Usually, it will be in his very own interest to manage the company in a way that provides clear benefits directly to him (i.e. profits) as well as indirectly (i.e. wages, jobs, taxes) to society. The commonly applied valuation framework (DCF, see above) is indeed based on the assumption of the enterprise as a going concern, i.e. a company that produces a steady stream of cash flows based on its productive activity. Restricting the freedom to develop the asset according to the plans of the new private owner will either lead to a lack of interest in the transaction, or a decrease in the price to be obtained (since the new owner will take this into account).

However, accepting the fact that in certain cases a number of conditions may well be reasonable and justified, a general list of such demands should be made publicly and transparently available to all interested parties. Only by doing so can investors estimate if these conditions are in principle acceptable to them and thus might proceed with the negotiations.

Recommendation 4: Regarding the imposition of specific sale conditions to a new owner, the authorities must strike a balance between public interests and the interests of new owner. In any case, a general list of such conditions must be made publicly available.

Strong and sustainable economic growth in the medium term can only be realised by significantly increasing the share of the private sector in economic activities in Belarus, as old growth drivers fade out. In turn, a higher participation of the private sector in economic activities can only be achieved by selling major parts of the still state-dominated economy. Privatisation is thus a key element in a broader structural reform agenda that Belarusian authorities need to pursue.

3. Belarusian Infrastructure Policies in 2010

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).

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, passenger transportation) have been kept at artificially low levels to contain inflation and to improve the welfare of the population before the elections of 2010. Extensively discussed ownership reforms in infrastructure industries have still not been implemented. As a result the lack of competition, overregulation, state dominance, numerous distortions, weak incentives and insufficient investment still remain main characteristics of the sectors.

The 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 the negative trade balance that is not covered by the capital inflow, which has already induced a serious devaluation of the national currency in 2011. Nevertheless, market oriented structural reforms in industries and infrastructure are no priority for the government. Currently, only selective privatization deals in the telecommunications and the gas sector are being discussed, targeted rather at raising funds than at reforming these sectors whose efficient functioning is pivotal for a modern economy.

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. Some positive changes in the tariff setting procedure, like increased flexibility of tariffs for international freight transportation or growth of tariffs for local freight transportation, were offset by a nominal freeze of tariffs for local passenger transportation and thus reduced cost coverage ratios. 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.

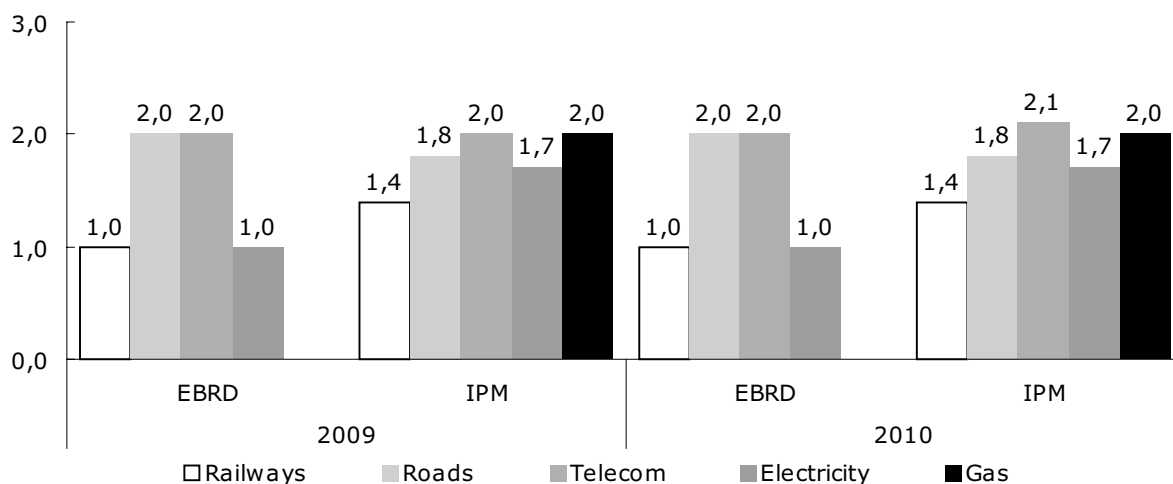
Although the government takes some steps to bring the **telecommunication sector** closer towards international standards (WTO rules in particular) by, for example, the sale of shares of mobile operators to foreign owners in previous years, real competition in the sector remains underdeveloped. Long awaited changes to the legislation regulating the telecommunication market, were not implemented. Thus, there are no well-defined plans for a 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. In the middle of the year Belarus accumulated some debts to Gazprom because of differences over the cost of imported natural gas and the Belarusian gas transit tariffs, but in the end of 2010 all imported gas and electricity were fully paid. The practice of tariff setting kept being non-market based and 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 in the sector per se as a

mechanism for improving efficiency. Thus, privatisation and the creation of an independent regulatory agency in the energy sector are not being discussed.

There are only minor differences between the EBRD and the IPM Research Center indices (Figure 2). Due to a finer scaling used by the IPM Research Center the indices of reforms in railway and electricity sectors are slightly higher than those of EBRD, while reforms in the road sector are slightly lower. Both the EBRD and the IPM Research Center experts did not find any measurable progress on the sectorial level.

Figure 2:
Infrastructure reform indices for Belarus



Sources: EBRD (2010). Recovery and Reform. Transition report 2010; EBRD (2009). Transition in Crisis? Transition report 2009; IPM RC estimates.

3.1. Railways

3.1.1. Progress in 2010

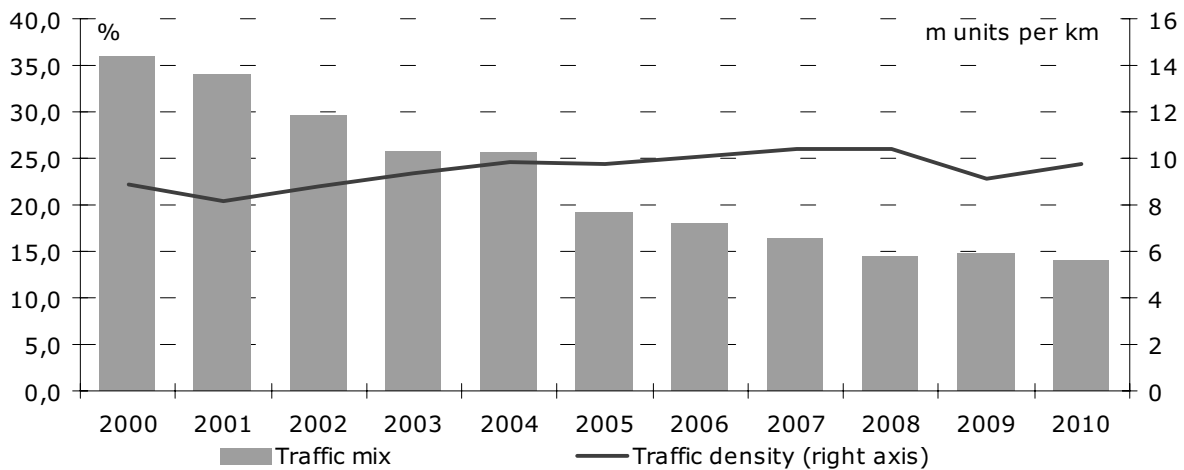
There were no significant reforms in the Belarusian railways sector in 2010. Belarusian Railways (BR) remains the sole operator and provider of transport services in the railway sector. Its activities include not only core services, like operating freight and passenger transport; maintaining and repairing infrastructure; and maintaining and repairing rolling stock, power supply, signalling and telecommunications, but also non-core activities, like operating social activity units; and producing goods and services unrelated to railway operations, such as agricultural goods.

However, despite being unreformed BR remains highly efficient compared to the other railways in the region. The World Bank report on Belarus transport sector development points that railways staff productivity in Belarus is slightly higher than EU-27 average. Moreover BR locomotives and wagons utilization is several times higher than in EU according to 2008 data¹⁰. There was even further improvement of main indicators of BR in 2010. Those could be largely attributed to the post-crisis recovery. First of all, the traffic density grew by 7.2% up to 9.8 m units per km of the railways (see Figure 3). Still lower than in the pre-crisis year 2008 the Belarus rail traffic intensity significantly exceeded corresponding figures for EU countries,

¹⁰ For comparison see World Bank (2010). Belarus: Transport Sector Policy Note, *World Bank Report* No. 55015-ECA.

and only slightly lagged behind US values¹¹. This high traffic density indicates an efficient use of the infrastructure. Consequently, the revenues generated by BR are sufficient to maintain a high level of profitability (20.7% in 2010).

Figure 3:
Trends in railway transportation environment



Note. 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 1 km of railroads.
Source: own calculations based on data of Belstat.

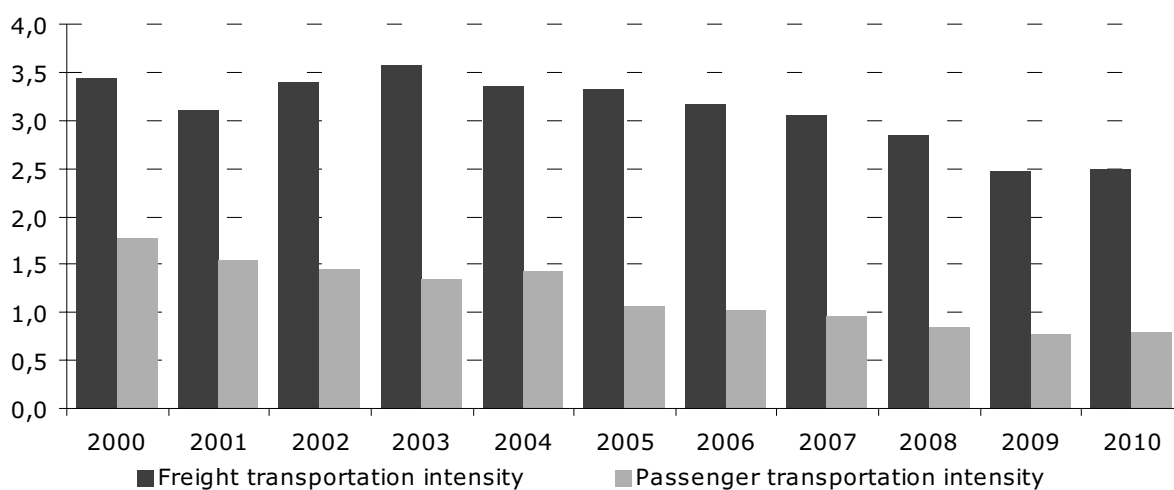
The growth of the traffic intensity can be mainly attributed to the increased freight transportation: it grew by 8.0%. Nevertheless, this increase did not fully compensate the decline in 2009, and thus freight traffic is still 5.8% below the pre-crisis level. However, recovery of the railways freight transportation exceeded economic growth, which resulted in the increased intensity of freight transportation (by 0.4%, see Figure 4). It was the first time since 2003, that an increase in this indicator was registered, signalling a slight improvement of the freight competitiveness of railway compared to the road carriers. At least four factors contributed to this improvement. First, the establishment of the customs union with Russia and Kazakhstan simplified the goods transit to these countries via Belarus as the level of control on the Russian border decreased significantly. This helped increasing corresponding transits. Second, the introduction of an automatic system for preparing transportation documents and accelerated customs procedure reduced barriers to railway freight transport. Third, the policy of flexible tariffs setting based on goods transported, country of destination and international agreements, that started in 2009, continued in 2010. It resulted in an average tariff growth of 18.8% yoy. This is a moderate growth compared to previous years, implying that the deterioration of price competitiveness of railway transportation compared to auto transport slowed down. Fourth, container freight transportation kept on developing, as the number of container trains regularly passing Belarus grew up to 10.

A further development of the railway freight transportation would require an improvement of the logistic services as well as a modernization of the rolling stock and infrastructure.

¹¹ For comparison see World Bank (2010). Belarus: Transport Sector Policy Note, *World Bank Report No. 55015-ECA*.

Freight transportation guarantees more than 80% of the BR revenues, while representing less than a half of all trips via the railway network¹². So there is an obvious problem of cross-subsidisation of the passenger transportation by freight transportation. The scale of this cross-subsidisation depends on the share of the passenger traffic in total traffic, that is captured by the traffic mix indicator, and the share of the costs covered by tariffs for passenger transportation services.

Figure 4:
Railway transportation intensity



Note. Freight traffic intensity is measured as a ratio of freight volume to GDP in real terms (tone-km per 1.000 BYR of 2000). Passenger transportation traffic intensity is measured as a ratio of passenger traffic volume to population (thsd passenger km per capita).
Source: own calculations based on data of Belstat.

The traffic mix indicator continued to decrease in 2010 (see Figure 3). Thus, the slight growth in 2009 seems to be a crisis-induced exception from the long-term trend of shrinking shares of rail in the transport mix. The increase in the passenger traffic (by 2.6%) and its intensity (by 2.5%) in 2010 – the first increase in a decade – was slower than the growth of road and freight traffic. Hence, the share of passenger transportation in overall rail transportation shrank. This should have contributed to the reduction of cross-subsidisation between the two segments and led to an improvement of the financial stance of BR.

However, the increased transportation volumes and their changed composition were counteracted by the tariff dynamics. Tariffs grew at a much lower rate than the average level of inflation in Belarus (see Table 1). Only, international passenger transportation is profitable. Tariffs for national transportation grew in 2010 for the first time since 2007. The tariffs were increased by 20% in the November of 2010, which resulted in an average 3.9% growth of tariffs, yoy. At the same time tariffs in suburban transportation decreased on average by 2.4%, implying a growing need for cross-subsidisation. Tariffs covered only 20.4% of the costs of this kind of transportation. An increase of the suburban transportation tariffs (by 13.6%) took place in April 2011, which was insufficient to compensate losses stemming from the policy of frozen tariffs, that has been in place during the last 4 years.

¹² For comparison see World Bank (2010). Belarus: Transport Sector Policy Note, *World Bank Report* No. 55015-ECA.

Table 1:

Development of nominal prices for railway transportation services, %, yoy

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Freight transportation	127.5	20.5	19.8	12.7	7.1	13.5	15.5	24.9	58.8	18.8
Passenger transportation										
International	83.7	40.2	32.4	51.5	12.1	17.3	28.6	23.6	25.3	8.5
National	151.4	97.4	41.7	17.0	9.5	11.3	13.3	0.0	0.3	3.9
Suburban	169.2	102.9	62.0	34.8	20.0	20.4	17.9	0.0	-3.2	-2.4
Consumer price index	61.1	42.6	28.4	18.1	10.3	7.0	8.4	14.8	12.9	7.0
Service price index	116.8	93.4	61.9	21.2	12.0	13.2	8.8	6.9	13.9	5.0

Source: Belstat.

Some reforms in the sector may be expected from a restructuring of passenger transportation that is going to be implemented from 2011 on. According to the new scheme transportation services are divided into five types: city transportation, regional, interregional, international, and commercial. Moreover, there will be separate business and economy class trains on national and international routes. City railway transportation is planned in Minsk and necessary infrastructure is under construction, while trains are ordered in Switzerland.

The financial situation of BR remains benign due to the high traffic density and the growing share of freight transportation in total traffic. Still it is passenger transportation that utilizes infrastructure the most, and there is a problem of loss-making local passenger transportation. Besides, the problem of modernisation is acute for BR¹³. This stresses the need for reforms in the sector to keep railway transportation efficient and competitive against road transportation.

3.1.2. Reform agenda

The most discussed problem faced by railways is the abolishment of cross-subsidisation between passenger and freight transportation. This can be achieved by forcing passengers to cover a greater share of the 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 seemed to be ready to start, as some enterprises under the BR conglomerate were listed to be privatized in 2010. However, this part of the reform remains unaccomplished.

Commercial services of BR should be separated from non-commercial ones, like national and suburban passenger transportation. The later should be subsidised from the budget. The level of the subsidies should be linked to the quality and quantity of the service provided. The subsidies should be organized in the form of Public Service Contracts for each railway line. This will imply abolishment of cross-subsidisation, growing competitiveness of freight transportation, financial sustainability of the BR and broader investment possibilities.

3.2. Roads

3.2.1. Progress in 2010

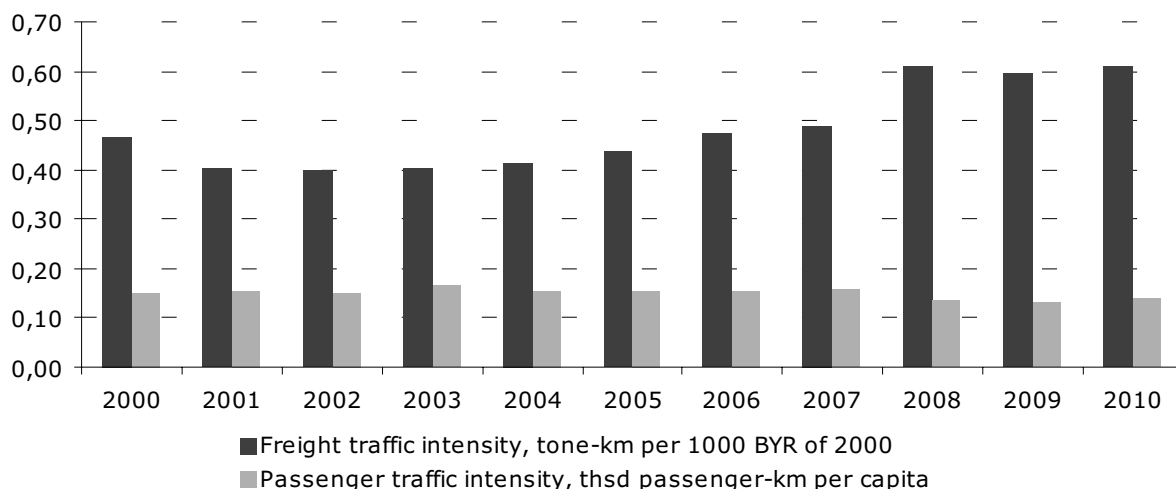
The situation in road sector is characterized by a continued lack of financing. The main change in 2010 in this regard was the abolishment of the Road Fund. The road maintenance,

¹³ For instance, infrastructure systems of BR are outdated. Most of them are more than 20 years old. Annual need for investments to maintain infrastructure and rolling stocks at current level is estimated at USD 600 m. See World Bank (2010). Belarus: Transport Sector Policy Note, *World Bank Report* No. 55015-ECA.

construction and repair works are now financed from the central government and local government budgets depending on the status of the road. The total sum of financing in BYR was almost equal to the level in 2009 (BYR 1952.6 bn), which means that there was a further reduction of the public expenditures on the road network, both in real terms and in percentage of GDP (down to 1.2% of GDP compared to 1.4% in 2009 or 2.3% of GDP in 2005). Most of the financing (BYR 1106.9 bn) came from the central government budget, while local budgets provided BYR 508.7 bn. Another BYR 337 bn were spent on road repairs in rural settlements within the Rural Areas Revival Program. In this circumstances attraction of loans gained crucial importance. Loans from the state bank Belarusbank and the World Bank provided additional funds. The World Bank loaned USD 150 m for the Minsk-Gomel road reconstruction program. Still the repair works are not carried out in the required volumes. For instance, the plan for major reconstructions in the Belarus road system for 2010 was accomplished only by 21% and for road maintenance as well as normal reconstruction by 57% each.

The freight transportation sector recovered quickly after the global economic crisis. Freight volumes grew by 10.8% implying a growth in freight traffic intensity by 3.0% (in tone-km, see Figure 5). In contrast to the crisis year 2009, when carriers concentrated on the domestic market, in 2010 growth primarily came from the international business. International freights increased by 23.2% in 2010 and the number of licenses for transit through EU countries used by Belarusian freight carriers grew by 17.4%. There are several factors behind this growth. Among others growth rates of the tariffs for freight transportation by trucks (12.5%) were still lower than for railways (18.8%). Besides, the abolishment of licenses for domestic freight transportation simplified operating conditions for carriers.

Figure 5:
Auto transportation intensity



Source: own calculations based on data of Belstat.

Another important factor that explains transportation growth was an increase of the transit by 29%. This is partly due to the economic recovery in Russia that causes higher Russian imports and thus more transit through Belarus. In addition the customs union contributed to a growth in transit. However, the effect of the customs union could have been more pronounced, if transit conditions had improved. For example, VAT refund simplification and refund period reduction could contribute much to a growth in transit. Russian importers are eager to run the custom clearance procedure in Belarus, as it costs less in Belarus. Besides, the whole procedure in Belarus is more transparent and less time-consuming than in Russia.

However, customs clearance in Belarus can only be done by the Belarusian counterparty. But Belarusian firms avoid this scheme, as it implies a payment of the VAT into the Belarusian budget. After the goods are brought to Russia the refund is typically granted only after a significant time lag (up to 6 months). Another problem that constrains transit through Belarus is the practice of the confiscation of goods in case of a violation of transit or import rules. However, this issue is going to be addressed in the State Program of Auto Transport Development for 2010–2015. Moreover, this program envisages the attraction of private investments into the road service infrastructure, but does not include any provisions for privatisation deals in the sector.

The public road passenger transportation volume rebound by 4.8% in 2010 after the stiff reduction in 2009. This increase led to a growth of the passenger traffic intensity by 5.1%. Stability of the tariffs contributed slightly to this growth. Suburban and intercity tariffs increased by 7.2% yoy each, which corresponds to the overall inflation level in Belarus (see Table 2). At the same time there was a further reduction of passenger transportation by private carriers. Its volume fell by 11.6%, being the result of unfair competition from state transportation companies. The main barriers to the private passenger transportation sector development remain. The most controversial issue is the status of the passenger transportation operator. In theory the operator is supposed to mediate between contractors (local authorities) and carriers. As the state carriers are usually functioning also as operators they are 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 a rival of the private carrier.

Table 2:

Price indices of auto transportation services, %, yoy

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Freight transportation	63.6	37.2	38.4	25.8	11.6	8.7	10.7	14.0	10.0	12.5
Passenger transportation										
suburban	72.5	113.7	51.0	50.4	23.3	19.6	13.3	4.6	22.0	7.2
interurban bus	68.5	75.3	36.7	35.9	26.2	13.5	13.2	4.6	14.6	7.2
Consumer price index	61.1	42.6	28.4	18.1	10.3	7.0	8.4	14.8	12.9	7.0
Service price index	116.8	93.4	61.9	21.2	12.0	13.2	8.8	6.9	13.9	5.0

Source: Belstat.

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 directly related to the road industry (Rural Area Revival Program, construction of the infrastructure for the nuclear power station) from the sources planned to be spent on the road sector additional financial scope could be gained.

High import taxes on vehicles hamper competitiveness of Belarusian carriers compared to railways and carriers of other countries. To make competition fairer, it might be helpful to lower taxes on imported trucks. Moreover, it is 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. Currently, state passenger transportation companies fulfil the role of operators, the control function should not be granted to them, as it creates moral hazard problem, as state passenger transportation companies have an interest to obstruct their private rivals. Besides, the trade union of "Sadruzhnast" argues that there should be changes to the tariff setting procedure. The practice of tariff setting for private carriers by local government bodies contradicts Belarus' legislation, which stresses necessity of the tariff setting procedure revision¹⁴.

Since many of public freight and passenger transportation companies 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 budget. A first step would be to sell off all freight transport vehicles and other redundant assets and concentrate on the core business.

3.3. Telecommunications

3.3.1. Progress in 2010

A number of legislative changes aimed at the development of the telecommunication sector were passed in 2010. The main goal of the changes was the abolition of "Beltelecom's" monopoly in the telecommunication industry. However, the adopted documents in practice increased the state's role in the regulation and monitoring of the telecommunication industry. The Decree #60 "On measures of national Internet segment usage improvement" of 01.02.2010¹⁵ essentially transferred the market control functions from "Beltelecom" to the Operational Analytical Center (OAC), which operates under presidential administration. According to the Decree the transfer of control was made in order to strengthen crime prevention in the country. In other words OAC obtained the role to control users' internet correspondence and monitor their movement within the net. Thus, the Decree partly served to raise governmental control over the Internet.

Further, the Decree #515 "On measures for data network development in the Republic of Belarus" of 30.09.2010¹⁶ transferred the right to operate the international traffic and the control over connections to other countries' telecommunication networks to the "National Traffic Exchange Center" (NCOT) under the OAC. That means that NCOT will have to protect the unified republican network (ERSPD) [that encompasses almost all Belarusian data networks] from unauthorized access, guarantees data network cooperation and organizes payments for data network connections to ERSPD.

However, simultaneously, the amendment to the law "On Telecommunications" was withdrawn from the House of Representatives in November 2010¹⁷. The amendments included long distance/international communication services liberalization and the elimination of "Beltelecom's" monopoly. The legislative process on these amendments has been going for several years¹⁸. The latest law draft was submitted to Parliament in June 2010, but was

¹⁴ See Stepanov, V. (2010). Liberalization for all. *Autobusiness* #44(750), November 4, http://www.abw.by/number/see_note/8199/.

¹⁵ <http://www.pravo.by/webnpa/text.asp?RN=P31000060>.

¹⁶ <http://www.pravo.by/webnpa/text.asp?RN=P31000515>.

¹⁷ BELTA "Amendment bill to the law "On Telecommunications" was withdrawn from the House of Representatives" http://www.belta.by/ru/all_news/society/Zakonoproekt-o-vnesenii-popravok-v-zakon-Ob-elektrosvjazi-otozvan-iz-Palaty-predstavitelej_i_529974.html.

¹⁸ "Beltelecom" belongs to the Ministry of Communications and Information and operates under its direct supervision. "Beltelecom" is the "national telecommunications operator", implementing state policies in

returned to the Council of Ministers with the request to ensure consistency with the Decree #515. As it stands, only the exclusive right of "Beltelecom" to manage international telecommunication connections will be abolished. But the elimination of "Beltelecom's" monopoly status was postponed and the law "On Telecommunications" from 2005 remains the primary source of regulation of the telecommunications market.

The Program of Telecommunication Development in Belarus for 2006–2010, and the State Program of Rural Sector Development for 2005–2010¹⁹ (in the part concerning telecommunication) also remained unchanged. In addition The Program of Telecommunication Development in Belarus for 2011–2015 was approved in summer 2010. The main goal of that concept is the increase of the information-communication technology usage. The document explicitly referred to increase the corresponding World Bank "doing business report" subindex which at the beginning of 2010 was equal to 4.74. The activities included into the concept, intend to achieve the level of 6.12 in 2012 and 7.48 in 2015.

Different telecommunication technologies remain differently treated in Belarus. "Beltelecom" owns the external communication channel as well as the internet infrastructure, landlines and other assets, requiring 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.

In 2010, tariffs for households' local connections in Belarus increased by 9% and for international connections by 2%. The tariffs for enterprises rose by 2.4% and 0.2% respectively. The increase in local connections tariffs has slightly surpassed the inflation rate in the country (CPI=7.8%). The slower growth of households' prices for international connections indicates a slight decrease in cross-subsidisation of local by international connections.

The profitability of the telecommunication sector decreased in 2010. The net profit of telecommunication organisations accounted for BYR 779.5 bln, which is 1.26% less than in 2009. The rate of return decreased from 32.3% in 2009 to 26.0% in 2010 (Table 3). The repeated decrease in profits was associated with the continuation of international financial crisis in Belarus, decreased purchasing power of the population and increased costs (investments in the development of infrastructure).

The density of landline phones per hundred persons reached 43.6 (41 in 2009). The amount of landline phones has increased to almost 4 m (3.8 m in 2009). In the context of the State Program of Rural Sector Development for 2005–2010 82.6 thsd. phones were introduced in rural areas and the density of rural phones per hundred persons reached 39.8. The use of Wireless Local Loop technology allowed to cover 99% of the rural settlements with telephone connections. Thus, "Beltelecom" continued fulfilling its social obligations within the framework of state programs.

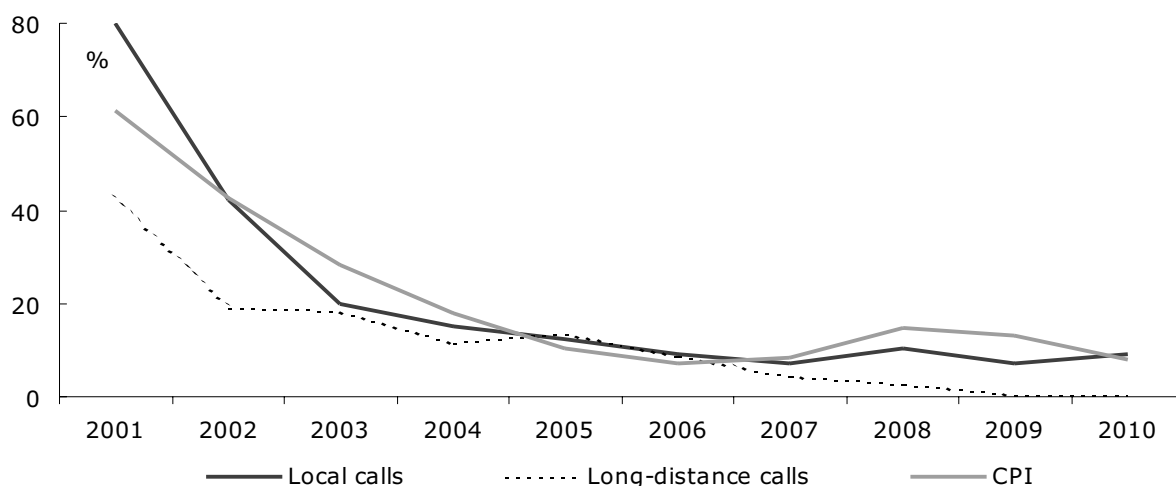
Upgrades of main fiber-optic networks to neighbouring countries (Poland, Lithuania, Ukraine) were performed in 2010. About 3594 km of fiber-optic links were constructed in 2010, while just 1320 km were planned. Internet protocol television (IPTV) was developed further. The IPTV service under the trade mark "ZALA" was implemented in all administrative and regional

the sector. "Beltelecom's" monopoly applies to external telecommunication as well as the distribution of international traffic for the independent private operators. In order to realize international calls all mobile operators have to use "Beltelecom's" capacities. Internet access service providers also have to rent "Beltelecom's" channels.

¹⁹ Resolution of the Council of Ministries of the Republic of Belarus ¹1395, dated 23.10. 2006 "On the Ratification of Program of Telecommunication Development in the Republic of Belarus for 2006–2010". Law of the Republic of Belarus ¹45–3, dated 19.07.2005 "On Telecommunication". Edict of the President of the Republic of Belarus ¹150, dated 25.03.2005 (with changes from 12.01.2007) "On the State Program of Rural Development for 2005–2010".

centres. About 160,000 users were subscribed to “ZALA” in 2010 and in the beginning of 2011 222,000 subscribers were registered. “Beltelecom” also plans to enter digital TV broadcasting with its “ZALA” project. At the final stage around 95% of the Belarusian territory should be covered with digital TV broadcasting.

Figure 6:
Annual Growth of Telephone Communication Tariffs for Households and CPI (2000–2010)



Source: Belstat.

Table 3:
Profitability of telecommunications services (in %, 2003–2010)

	2003	2004	2005	2006	2007	2008	2009	2010
Telecommunications sector	13.5	26.9	37.5	45.1	40.4	37.8	32.3	26.0

Source: Belstat.

Broadband internet access continues to develop rapidly. The amount of broadband internet access subscribers in 2010 was 1.7 m, including the 750,000 subscribers of the internet provider “byfly” (the amount of subscribers of “byfly” was 460,000 in 2009). In order to increase internet-accessibility the wireless technology WiFi is used. Around 645 “Beltelecom” access points are already functioning in Belarus, 262 of which are situated in Minsk. The mobile operators “Velcom” and “MTS” are providing WiFi internet access services through “Beltelecom” access points. Moreover, broadband access through WiMAX was implemented in Minsk at March 31, 2010. As of January 1, 2011 22 base stations are operated in the city. “Beltelecom” planned to install 300 base stations in Minsk and all administrative centres till the end of 2010. However, it was reported in September 15, 2010 that “Beltelecom”’s application for a more effective WiMAX frequency band (2.5-2.6 GHz) was declined by the General Radio Frequency Centre (GRFC). Thus, the WiMAX deployment was temporarily put on hold. Besides, “Beltelecom” plans to continue the development of next generation networks of IP Multimedia Subsystem (NGN/IMS). Corresponding tenders for expansion are currently carried out.

The external gateways capacity continues to grow. “Beltelecom” expanded the country’s gateway to 57 Gbps, 51 of which were in Russian direction and 6 Gbps in western direction. The external channel width was equal to 22 Gbps in the beginning of 2010.

In 2010 all mobile operators focused on the deployment and promotion of 3rd generation mobile telecommunication services (3G). 3G allows high-speed Internet access, video calls, mobile TV and other services over the mobile phone network. The mobile operator "Life:)" was the first company that introduced 3G services in autumn 2009. At the end of 2010 3G life:) covered at least 97 Belarusian settlements and 895 3G/HSPA base stations were at the company's disposal. On December 31, 2009 GRFC of Belarus issued licenses on 3G network construction and exploitation to the mobile operators "VELCOM" and "MTS". In February 2010 "VELCOM" received a license for 3G services valid till September 2017. Since March 2010 "VELCOM" provides 3G services using the HSPA+ technology. "VELCOM's" 3G services cover 65% of the total population. "MTS" announced the launch of 3G services using the HSPA+ technology in May 2010 and its' commercial operation start in September 2010. At the end of 2010 the 692 base stations were available and covered more than 50% of the population. Besides, in December 2010 "MTS" received an additional 5 MHz frequency band for the UMTS network development allowing an increase of the 3G network capacity and data transmission rate.

Moreover, the development of 3GPP Long Term Evolution (LTE) technology is planned in Belarus. During a meeting between GRFC and the Belarusian mobile operators in November 2010 the later were granted the right to perform an operational test of the LTE technology, which will last until May 2011. By the end of 2010 "life:)", "MTS" and "Beltelecom" announced their interest regarding the construction of an LTE network.

The 2010 results of the main mobile operators are the following (see Table 4).

Table 4:
Annual Results of Mobile Operators'

Mobile Operator	Subscribers Amount	Territory Coverage	Revenue	Revenue Growth	ARPU ²⁰	MOU ²¹	Market Share
VELCOM ²²	4.354 m	95.3%	USD 460.1 m	6.72%	USD 8.30	174 min	41.9%
MTS ²³	4.719 m	99.7%	USD 452.5 m	14.4%	USD 7.52	482 min	45.1%
life:) ²⁴	1.5 m	90.2%	USD 48.9 m	281.0%	USD 3.70	n/a	13.0%

Source: Companies' financial statements.

According to Table 4 "MTS" kept the position of the largest cellular operator in Belarus. The company managed to increase significantly its corporate base - the number of business clients increased by more than 50%, and the number of subscribers within the corporate segment also grew by 50%. Out of hundred largest enterprises 86 were "MTS" clients by the end of 2010. The lower profit of "life:)" is due to the fact that the company continues fighting for market shares. The company announced that it will not focus on profits during the next few years, that is why it can afford such results. As for the social responsibility of the companies', both "MTS" and "VELCOM" were awarded the title "Socially Responsible Brand-2010" of the national contest "Brand of the Year". "MTS" was also ranked as a brand of the year in the categories "Active Social Position", "Public Private Partnership".

Thus, in 2010 as in previous years the telecommunication sector in Belarus remained highly monopolized except for the mobile communication market and the state kept an influential role. The basic local telecommunication services were provided at tariffs below cost and thus cross-subsidisation remained. "Beltelecom"'s monopoly in key services hindered the

²⁰ ARPU – Average Rate per User.

²¹ MOU – Minutes of Use.

²² Owner of "VELCOM": SB Telecom Ltd. – 100%.

²³ Owners of "MTS": "Beltelecom" – 51% and "Mobile Telesystems" – 49%.

²⁴ Owners of "Belarusian Telecommunications Network": "Turkcell" – 80%, "Beltelecom" – 20%.

development of competition in the market and the introduction of innovative services at low cost.

The main characteristics of the telecommunications sector in 2010 were:

- a continued social orientation in the government's policy in the sector and the perpetuation of cross-subsidies;
- the absence of awaited reforms of the telecommunication legislation as well as an increased level of state control over the industry;
- an intense competition between mobile operators for existing subscribers through introduction and development of various services;
- investments in new telecommunication technologies, in particularly in internet connections, IPTV as well as in increasing the quality and spectrum of telecommunication services;
- an increase in quality and spectrum of telecommunication services; a gradual decrease in tariffs for internet connections;
- a continuation of exaggerated tariffs for innovative telecommunications services and international calls;
- A continued deployment of landline and mobile communication networks outside major cities.

3.3.2. Reform agenda

Even though some regulatory changes occurred in the telecommunications sector in 2010, implementation major reform is still under discussion by the authorities. As a result, our policy recommendations remain unchanged. Active government interference in the decision making at the micro and macro level constraints the development of the telecommunication 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 the benefits for selected population groups. Social benefits should be provided in the form of direct money compensations and not through lower telecommunication tariffs.
- 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 lower tariffs for long-distance calls, increase the interest in investments in short-distance connections, bring conformity to international norms in telecommunications regulation and facilitate the 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 a prerequisite for building trust among investors in a newly liberalized sector.

3.4. Gas

3.4.1. Reforms in 2010

In 2010 the natural gas sector in Belarus consisted of the gas transmission system operator and wholesaler Beltransgaz and the state-owned enterprise Beltopgaz, a state industrial association managed and controlled by the Ministry of Energy of Belarus. While Beltransgaz is responsible for natural gas transportation to Belarus and managing the natural gas transit, Beltopgaz deals with the distribution and retail sales of natural gas to final consumers inside Belarus.

No significant structural changes were undertaken in the Belarusian natural gas sector in 2010. Rising gas prices and a small increase in the tariffs for domestic consumers did not lead to structural reforms. Nevertheless, the sensitivity of "the gas issue" for the Belarusian economy was once again confirmed by a number of events.

On December 31, 2006 an agreement for 2007–2011 was signed between the companies Beltransgaz (Belarus) and Gazprom (Russia). According to this agreement the gas prices for Belarus are set to converge towards the European average gas price. So, 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), but due to requests from Belarus, Russia lowered this rate to 70%. In 2010, it was assumed that Belarus will have to pay 90% and in 2011 it was planned to reach the average European price minus transportation costs and export duties. In addition, the parties agreed that Gazprom will buy a 50% stake in Beltransgaz for USD 2.5 billion in equal portions of 12.5% each over a four-year period during 2007-2010. Accordingly, in 2010 Gazprom acquired the last 12.5% share of Beltransgaz for USD 625 m, now controlling 50%. Among other changes in the energy sector, 2010 saw the corporatisation of several enterprises belonging to Beltopgaz, mainly connected with peat mining. Now all the shares of the newly created joint stock companies (JSCs) belong to the Belarusian state, but they still haven't been privatized.

In the beginning of 2010 prices for Russian gas for Belarus increased from USD 150 per thousand cubic meters to USD 169. Nevertheless, during the first half of the year the Belarusian side continued to pay the old price for imported gas. Thus, by June 2010 Belarus accumulated a USD 187 m in debts with Gazprom. Belarus justified this unilateral curtailment of the gas price by disputes over the gas transit fees. According to the Belarusian side, the Russian gas monopoly paid USD 1.45 per thousand cubic meters per 100 km instead of the contracted USD 1.74. Correspondingly, Belarus argued that Gazprom over the same period had accumulated a debt of USD 200 m vis-à-vis Belarus. However, Gazprom insisted on the priority payment for gas supplied to Belarus, and, due to the protraction of the conflict, decided in the second half of June 2010 to cut gas supplies to Belarus. The conflict was resolved within a few days, when Belarus paid for its gas debt, and only few hours later, Gazprom covered its transit debt.

The newly emerging disagreement on the conditions for Russian gas supplies to Belarus exhibit that both sides do not see the current arrangement as a stable equilibrium. In fact, Belarus currently hopes to get some gas price discount by creating a Single economic space with Russia and Kazakhstan from January 1, 2012. By being part of the customs union the Belarusian government expects that Belarus will be treated as a domestic gas customer in the new gas price agreement for 2012–2015.

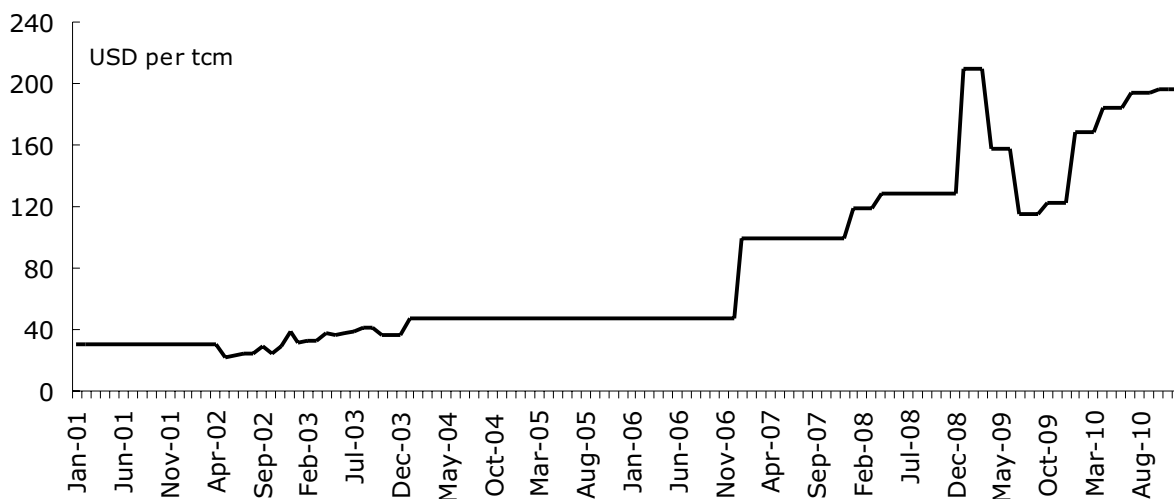
In 2010 Belarus imported 21.6 billion cubic meters of gas from Russia, which is 22.4% more than in 2009 (17.6 billion cubic meters). The growth in consumption is mainly due to the stabilization of the Belarusian economy after the crisis and the corresponding growth in industrial production.

In 2010 the transit of gas through the territory of Belarus decreased by 3.1% and amounted to 43.2 billion cubic meters (in 2009 - 44.2 billion cubic meters). The gas transit is controlled mainly by Russia. After the June gas conflict, during which gas supplies to the European Union have been limited for some time, a supplementary agreement to the existing gas transit contract was signed. According to the new agreement, the tariff for gas transit in 2010 was USD 1.88 (increase of 30% over the 2009 tariff of USD 1.45), and in 2011 the rate is expected to increase to USD 2 (an increase of 6%). Nevertheless, despite the significant increase of the transit tariff, tariffs in Belarus are still significantly below those billed by Ukraine (2010: USD 2.5).

In 2010 Belarus obtains Russian gas at the lowest price in Europe. Because the price of the oil basket, to which the gas tariff is pegged, changes on a quarterly basis, Belarus saw natural gas prices change once every three months. In 2009, Belarus paid about USD 148 per thousand cubic meters (an increase of 16% compared to 2008), the average price for gas imports in 2010 increased by 27% to USD 188 per thousand cubic meters. Thus, due to rising costs and increased imports Belarus payment for gas imported from Russia increased by 56.2% to USD 4.06 billion

Figure 8:

The development of prices for imported natural gas from Russia, 2001–2010



Note. Without VAT.

Source: The Ministry of Statistics and Analysis.

After Belarus paid back its debt to Gazprom at the end of June 2010 there are no external natural gas debts to Russian suppliers by the end of the year. Domestic gas payments also continue to be good. Almost all payments were made in cash. Nevertheless, due to the increase of gas prices, arrears of domestic consumers tripled (Table 5).

Taking into account that prices for gas imports rose by 27% in comparison with the previous year, the growth rate of tariffs for final consumers was significant. For example, for most industrial customers gas prices increased twice: in February by 25% and in August 2010 by

13.2% to USD 240 per 1000 m³ (excluding VAT). Some preferential consumers paid for gas 50-80% of the official price (Belenergo, some petrochemical, peat, light industry enterprises, etc.). The growth rate of tariffs for the population was less significant. Belarusian people traditionally pay less for gas than the companies (USD 158 vs. USD 240). Thus, cross-subsidization of the population continued in 2010 (low tariffs for the population are covered by higher tariffs for industrial consumers).

Table 5:

Arrears for natural gas (USD m), 2005–2010

	As of January 1, 2005	As of January 1, 2006	As of January 1, 2007	As of January 1, 2008	As of January 1, 2009	As of January 1, 2010	As of January 1, 2011
Arrears of domestic consumers	247.51	186.05	131.03	104.30	102.30	36.00	115.60

Source: Belstat.

3.4.2. Reform agenda

The high importance of gas in the Belarusian economy makes low and stable gas prices desirable. At the same time high demand for investment in infrastructure and equipment in the gas sector should be, at least partially, funded by private investors, because budget funds are limited and needed primarily in the social sector (health, education, etc.). In addition, the inevitability of further price increases for imported gas from Russia makes it extremely important to search for ways to reduce costs within the sector and increasing its efficiency. Consequently, the gas sector needs a sustainable development program based on retained profits. Therefore, regulatory policies should be aimed at promoting the motivation to increase the efficiency of the sector and the creation of attractive investment opportunities for 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-subsidization. Prices for all industrial consumers should be equal and costs should account for investment needs;
- In case providing social privileges to some groups of households remains a priority of the government, it should be dealt in a transparent manner. Here, targeted aid or direct income subsidization are typically preferable;
- It seems necessary to conduct an independent audit of the sector in order to find areas to reduce costs, as well as an in-depth restructuring of the sector. Today the sector is overburdened with non-productive assets, and (although in part already officially corporatized) is not independent to make financial and investment decisions. Restructuring and corporatization also include the necessity and the possibility to divest all ancillary enterprises not related to the core business;
- Reforms must include a strict legal separation (unbundling) of network operations and natural gas supply (retail) activities within each company. 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.

3.5 Electricity

3.5.1. Reforms in 2010

The Belarusian power system includes six independent regional republican unitary enterprises, or RUPs (also called Oblenergo) and HV power lines connecting Belarus to the power grids of neighbouring countries (Russia, Ukraine, Lithuania and Poland). This 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. Moreover, district heating makes reforming the Belarus electricity sector very difficult, as it is hard to establish a fair split of cost for heat and electric energy from CHP plants.

Electrical power generation in Belarus totalled 32.5 billion kilowatt-hours (kWh) in 2010, an increase of 13.5% from 2009. Although Belarus is capable of meeting its domestic requirement on its own, it is more profitable to import electricity during the summer. In 2010 Belarus imported 2.97 billion kWh, which is 66.3% of the 2009 imports.

The payment discipline remained strict; barter schemes have been almost liquidated (the share of non-monetary payments amounted to less than 1%). The collection ratio for internal consumption exceeded 100%. Therefore, the existing arrears of the final consumers to Belenergo continue to decrease (Table 6).

Table 6:

Debts from electricity consumption (USD m), 2005–2010

	As of January 1, 2005	As of January 1, 2006	As of January 1, 2007	As of January 1, 2008	As of January 1, 2009	As of January 1, 2009	As of January 1, 2010
Domestic consumers	328.62	293.92	222.52	152.48	148.2	29.7	27.4

Source: Belstat.

During 2010 electricity tariffs for the population did not increase. Electricity rates for businesses were raised at 10% on February 15, 2010, and tariffs for all non-household consumers increased by 20.9% USD/kWh on August 20, 2010. Due to the lack of growth of household-tariffs, in 2010 the population paid less than 50% of the real cost of electricity.

In 2010, a policy to increase energy efficiency and the use of local fuels for energy production was continued. According to government plans plants running on local fuels will be built in every region of Belarus in the next two to three years. Also in 2010, the principal decision to build a 2.0-2.4 GW nuclear power plant in Belarus (Ostrowiec) was made. In 2010 companies from France, the USA, Russia and China stated to participate in the tender for the construction of the first Belarusian nuclear power station. It is assumed that the first nuclear unit will begin its operation in 2016, the second - in 2018. The Government of Belarus expects that by 2018 up to a third of all electricity consumed in the country will be produce at the nuclear power station.

As a result of negotiations on March 15, 2011 Prime Ministers of Belarus and Russia signed an intergovernmental agreement on building the Belarussian NPP. "Atomstroyexport" (governmental nuclear company) will participate in building of the NPP from Russian side. In May it was announced that the credit contract is expected to be signed by the end of summer. Belarus is looking forward to be given a Russian governmental loan of USD 7 – 9 billion. However, Russian representatives insist on creating a joint venture for distribution of

energy of the future NPP and want to have at least 50% of this company. Belarusian side doubts that it meets its national interests, so negotiations will continue.

Belarus has been increasing the funding of energy saving measures. According to the Department of Energy BYR 3491.2 billion (about USD 1.18 billion) were used to carry out energy-saving measures in Belarus in 2010. The main sources of financing for energy efficiency measures are own funds of organizations - 44.7% of the total, and raised funds (credits, loans) - 29.4%. The share of budgetary resources amounted to 25.9%. The department showed a further decline of innovation funds of ministries (which were created for the stimulation and direct financing of innovation projects, including in the energy sector) and the department's participation in the financing activities of energy conservation programs, the proportion of which in total has dropped to 3.6% in 2010 against 6.4% in 2009 and 18.4% in 2008.

3.5.2. Reform agenda

The Belarusian electricity sector is faced with increasing demand, the effects of 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), 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 the motivation to save energy) and decreases investment funds of energy companies.

It is worth to mention, that continued increasing price 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. The planned nuclear power station will not be active before 2016 and the conditions of its functioning are not clear yet.

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 levels for all consumers without any price privileges or cross-subsidization;
- 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 subsidization;
- Gradual implementation of a tariff differentiation schemes could be very useful. According to our estimation, it would approximately lead to a 5% reduction in peak load,



bringing essential economy 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 constant load for the nuclear power plant and renewables in off-peak periods.

- 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: transmission 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 follow the initial step. 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.

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).

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. 2010: 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 in the market. 2010: 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, scheduled for 2010, did not happen, thus keeping the index at the level of 2009. 2010: 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. 2010: 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 profits is secondary to the primary objective. There is also a certain amount of state interference in the business and its investment decisions. 2010: 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. 2010: 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. 2010: 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. 2010: 1.3.
- 1.3.3. Belarusian Railways consist of 6 regional companies. Altogether the company unites 92 legal entities. 2010: 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. 2010: 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 2010 revenues covered only 20.4% of its costs). 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 2008–2010 there was no tariff increase at all for suburban transportation, despite high inflation rates. There cross subsidies between domestic and international freight transportation should have been eliminated, as there was growth of the tariffs for domestic freight transportation early in 2010 (cost coverage ration at the end of 2009 was 92%). 2010: 2.0.

- 2.1.3. Belarusian Railways consistently makes profits (the 2010 rate of return was 20.7%). Due to the distorted structure of tariffs, however, the amount of cross-subsidisation is still very high, as suburban and national passenger transportation suffers losses. 2010: 1.7.

2.2. Payments

- 2.2.1. A certain amount of indebtedness exists between the different enterprises within Belarusian Railways. 2010: 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. 2010: 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. 2010: 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. 2010: 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. 2010: 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. 2010: 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 legitimized. 2010: 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. 2010: 1.7.

- 3.2. Access regulation:** Access by outside firms to the market is not possible. 2010: 1.0.



ROADS

1. Commercialisation and privatisation

1.1. Ownership

- 1.1.1. Roads are 100% in state and communal ownership. 2010: 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. 2010: 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. 2010: 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. 2010: 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. 2010: 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. 2010: 1.7.

1.3. Organisational structure

- 1.3.1. Road management is completely separated from freight and passenger transportation services. 2010: 3.0.
- 1.3.2. Road construction and maintenance are separated from the natural monopoly operators. Cooperation between them is based on tendering procedures. 2010: 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. 2010: 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. 2010: 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 used as a source for financing road infrastructure maintenance. There is one state owned toll road (M1/E30 Brest – Minsk – Russian Federation border), but revenues do not cover operational costs on this road. 2010: 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. 2010: 1.7.

2.2. Payments

- 2.2.1. A certain, but not a significantly large amount of indebtedness between ancillary services providers persists. 2010: 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. 2010: 2.3.
- 2.2.3. State financing of road construction and repair in 2010 has not improved. The total expenditures on the road infrastructure have fallen by further 0.2% of GDP. Besides, these expenditures also includes ones within the Rural Areas Revival Program and related to the atomic power station construction. However, the index has not been changed, as the postpones in repair works due to the lack of financing were widespread before 2010 as well. 2010: 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 losses of bus, tram and trolleybus transportation are 14.1, 19.6 and 14.8%, which is higher than in 2009. In many cases the prices charged by private firms resemble those of their public competitors (price discrimination). Indicator remained unchanged. 2010: 1.3.
- 2.3.2. Subsidies are directed straight to the service providers in a non-transparent way. 2010: 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. 2010: 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. 2010: 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. 2010: 1.7.

- 3.2. Access regulation:** Access is regulated by licensing. Only domestic freight transportation benefited from the reduction of the list of activities requiring licenses in 2010. 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 2010. 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 3.8% in 2009 to 3.2% in 2010). The indicator grew slightly due to licensing abolishment. 2010: 2.3.



TELECOMMUNICATIONS

1. Commercialisation and Privatisation

1.1. Ownership

- 1.1.1. The cable infrastructure is primarily owned by Beltelecom, it further extends 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. Mîst 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. 2010: 2.7.

2.1.2. Local calls are subsidized by international calls. The indicator does not change. 2010: 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. 2010: 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. 2010: 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. 2010: 3.3.

2.2.3. The indebtedness level is low. The indicator does not change. 2010: 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. 2010: 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. 2010: 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. 2010: 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. 2010: 1.3.

3.1.3. Administrative regulation is strong. The decision-making process is not open to the public scrutiny and is influenced by the government policies. The rules of the sector operation are determined by the legal acts, however, the introduction of additional controlling organization that obeys to government caused a number of questions regarding supremacy and functionality. As a result the indicator changed from 1.3 to 1.0. 2010: 1.0.

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. 2010: 1.7.



GAS

1. Commercialisation and privatisation

1.1. Ownership

- 1.1.1 Gasprom acquired the next 12.5% of the shares of Beltransgaz (having acquired 50% in 2009). The remaining shares of Beltransgaz belong to the state. The indicator increased from 2.7 in 2009 to 3.0 in 2010.
- 1.1.2. Transportation and distribution of gas are unbundled. 11 enterprises which belong to Beltopgaz (mainly mining peat) were corporatized, however all the shares still belong to the state. The indicator increased from 1.7 in 2009 to 2.0 in 2010.
- 1.1.3. Construction, infrastructure maintenance and other ancillary enterprises are mostly state owned and/or are controlled by the state concerns. 2010: 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. 2010: 1.3.
- 1.2.2. Commercial goals are weak. Political influence on management and investment decisions prevail. 2010: 1.7.
- 1.2.3. The role of private sector in providing service for the gas sector is minor. 2010: 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. 2010: 1.7.
- 1.3.2. The enterprises that provide supporting services (delivery, installation) are separated economically and organisationally. 2010: 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. 2010: 2.0.
- 2.1.2. Beltransgaz prices cover average costs. However, tariffs grew up for the majority of enterprises. 2010: 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. 2010: 2.3.

2.2. Payments

- 2.2.1. In 2010, debts grew up, but 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. 2010: 3.3.
- 2.2.3. Budget debts are low and they do not exceed the level of payment for monthly gas consumption. 2010: 3.3.

2.3. State funding

- 2.3.1. Some categories of consumers buy gas at preferential prices. In 2010 debt write-off were not practiced and the amount of state funding was reduced. 2010: 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. 2010: 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. 2010: 1.0.
- 3.1.2. The Ministry of Economy performs some regulatory functions in the sector. 2010: 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. 2010: 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. 2010: 2.0.

ELECTRICITY

1. Commercialisation and privatisation

1.1. Ownership

- 1.1.1. The enterprises of Belenergo is 100% state property. 2010: 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. 2010: 1.0.
- 1.1.3. Construction, infrastructure maintenance and other ancillary enterprises are mostly state owned and/or are controlled by the state concern. 2010: 1.3.

1.2. Operation

- 1.2.1. Ministry of Energy regulates the activities of the Belenergo enterprises, but the enterprises functions as an independent financial units. 2010:1.3.
- 1.2.2. Commercial goals are weak. Political influence on management and investment decisions is prevalent. 2010: 1.7.
- 1.2.3. Construction and infrastructure maintenance are provided not only by the enterprises of Belenergo, some of the providers are private. 2010: 2.3.

1.3. Organisational Structure

- 1.3.1. There is no separation between production, distribution and sales. 2010: 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 holding. 2010: 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. 2010: 2.0.
- 2.1.2. Prices cover the average costs of Belenergo. However, cross subsidisation of heating by electricity still takes place and has become even higher. 2010: 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 2010, prices for some consumer groups remained below costs and the cross subsidisation was even increased. The indicator remains at 2.0 in 2010.

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. 2010: 3.3.
- 2.2.2. The level of payments, especially among industrial enterprises, increased. In 2010 they paid fully for current electricity consumption. Nevertheless debts stemming from the past of various consumers remain. 2010: 3.3.
- 2.2.3. Budget debts are low and they do not exceed the average level of payment for monthly electricity consumption. 2010: 3.3.

2.3. State funding

- 2.3.1. Some categories of consumers buy electricity at preferential prices. New debts for electricity in public sector were restructured as a kind of support by the government. In 2010 no debt write-off was practiced. 2010: 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. 2010: 2.7.

3. Regulatory and institutional development

3.1. Effective regulatory institutions

- 3.1.1. The top management of Belenergo is appointed by the Ministry of Energy subject to approval by the President. 2010:1.0.
- 3.1.2. Only household tariffs are set externally from Belenergo (by the Council of Ministries). Belenergo submits tariffs to the Ministry of Economy. Belenergo is managed by the Ministry of Energy. 2010: 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. 2010: 1.0.

- 3.2. **Access regulation** to the power lines network is provided by State throw Belenergo. 2010: 1.0.

Appendix 3

Infrastructure Indicators Evaluation

	Indicator	Railway		Roads		Telecommunications		Gas		Power	
		2010	+/-	2010	+/-	2010	+/-	2010	+/-	2010	+/-
1.	Commercialisation and privatisation	1.5	-	1.7	-	1.9	-	1.9	+0.1	1.5	-
1.1.	Ownership	1.4	-	1.3	-	2.0	-	2.1	+0.2	1.2	-
1.1.1	Natural monopoly	1.3	-	1.0	-	1.7	-	3.0	+0.3	1.3	-
1.1.2	Potentially competitive businesses	1.3	-	1.3	-	2.3	-	2.0	+0.3	1.0	-
1.1.3	Ancillary businesses	1.7	-	1.7	-	2.0	-	1.3	-	1.3	-
1.2.	Operation	1.7	-	1.4	-	1.7	-	1.8	-	1.8	-
1.2.1	Natural monopoly	1.3	-	1.3	-	1.3	-	1.3	-	1.3	-
1.2.2	Natural monopoly planning and investment decisions	2.0	-	1.3	-	1.7	-	1.7	-	1.7	-
1.2.3	Private sector participation in service contracts	1.7	-	1.7	-	2.0	-	2.3	-	2.3	-
1.3.	Organisational structure	1.4	-	2.2	-	2.0	-	1.9	-	1.5	-
1.3.1	Separation of natural monopoly and potentially competi-	1.0	-	3.0	-	2.3	-	1.7	-	1.0	-
1.3.2	Separation of ancillary businesses	1.3	-	2.0	-	2.3	-	2.0	-	2.0	-
1.3.3	Decentralisation	2.0	-	1.7	-	1.3	-	-	-	-	-
2.	Tariff reform	1.5	-	1.8	-	2.7	-	2.7	-	2.7	-
2.1.	Structure of tariffs	1.8	-	1.9	-	2.9	-	2.2	-	2.1	-
2.1.1	Political vs. regulated operator's	1.7	-	2.0	-	2.7	-	2.0	-	2.0	-
2.1.2	Natural monopoly pricing	2.0	-	2.0	-	2.3	-	2.3	-	2.3	-
2.1.3	Potentially competitive businesses pricing	1.7	-	1.7	-	3.7	-	2.3	-	2.0	-
2.2.	Payments	1.8	-	2.1	-	3.3	-	3.3	-	3.3	-
2.2.1	Intra-industry payments ratios	2.0	-	2.3	-	3.3	-	3.3	-	3.3	-
2.2.2	Final consumers collection ratios	2.3	-	2.3	-	3.3	-	3.3	-	3.3	-
2.2.3	Budget indebtedness	1.0	-	1.7	-	3.3	-	3.3	-	3.3	-
2.3.	Budgetary funding	1.0	-	1.3	-	2.0	-	2.7	-	2.7	-
2.3.1	Subsidies level	1.0	-	1.3	-	2.7	-	2.7	-	2.7	-
2.3.2	Subsidies procedure	1.0	-	1.3	-	1.3	-	2.7	-	2.7	-
3.	Regulatory and institutional development	1.2	-	2.1	+0.2	1.6	-	1.5	-	1.0	-
3.1.	Effective regulatory institution	1.4	-	1.8	-	1.4	-0.1	1.0	-	1.0	-
3.1.1	Management selection of competitive businesses	1.3	-	2.0	-	2.0	-	1.0	-	1.0	-
3.1.2	Independence of regulator, insulation from political in-	1.3	-	1.7	-	1.3	-	1.0	-	1.0	-
3.1.3	Transparency of regulation	1.7	-	1.7	-	1.0	-0.3	1.0	-	1.0	-
3.2.	Access regulation	1.0	-	2.3	+0.3	1.7	-	2.0	-	1.0	-
	RC IPM indicator	1.4	-	1.8	-	2.1	-	2.0	-	1.7	-
	EBRD indicator	1.0	-	2.0	-	2.0	-	-	-	1.0	-

Sources: EBRD (2010). Recovery and Reform. Transition report 2010; EBRD (2009). Transition in Crisis? Transition report 2009; IPM Research Centre estimates.



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.

Analytical materials

Current research products and publications of the project group are available via the Internet (<http://research.by/get>, <http://www.get-belarus.de/index.php?content=publications>).

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.

Belarusian Macroeconomic Forecast

A semi-annual bulletin has been published since July 2010. It provides readers with the forecast of Belarus' economy development for two upcoming years. The forecast is done for macroeconomic trends, public finance, monetary policy, balance of payment. It contains also annexes with main macroeconomic indicators and their forecast.

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/01/09 The Belarusian Insurance Market Characteristics in the Context of Economic Liberalization: Analysis and Policy Recommendations
- 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
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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.

