Infrastructure Monitoring for Ukraine (IMU)

No. 5/2003

Boris Dodonov, Christian von Hirschhausen,
Ferdinand Pavel, Ivan Poltavets,
Oleksandr Shcherbakov

June 2003

Boris Dodonov, MA in Economics: Research Associate at the Institute of Economic Research and Policy Consulting (IER) in Kyiv. Specialises in structural and competition policy with a particular concentration on deregulation and corporate restructuring of the energy sector in transition countries.

Christian von Hirschhausen, Dr. habil.: Member of the German Advisory Group with the Ukrainian Government in Kyiv, Research Associate at the German Institute for Economic Research (DIW), Berlin, and lecturer at the Berlin University of Technology (TU Berlin). Specialises in structural and competition policy and enterprise reform.

Ferdinand Pavel: Dr. rer.agr.: Research Associate at the German Institute for Economic Research (DIW), Berlin, and member of the German Advisory Group with the Ukrainian Government in Kyiv. Works on structural policy, energy supply and trade policy.

Ivan Poltavets: MA in Economics: Research associate at the IER. Specialises on infrastructure development and regulation, with a particular concentration on restructuring of the railway and road sectors.

Oleksandr Shcherbakov, MA in Economics: Research Associate at the IER. Focuses on competition policy, large-size enterprise restructuring and productivity analysis.

List of abbreviations

AMC – Antimonopoly Committee of Ukraine

CMU – Cabinet of Ministers of Ukraine

EBRD – European Bank for Reconstruction and Development

EU - European Union

IMU – Infrastructure Monitoring of Ukraine

MFEU – Ministry of Fuel and Energy of Ukraine"

Naftogaz – National joint-stock company "Naftogas of Ukraine

NBU - National Bank of Ukraine

NCRC - National Communication Regulation Commission

NERC – National Electricity Regulation Commission

SCCI – State Committee on Communications and Informatisation

SPF - State Property Fund of Ukraine

UZ - State Administration of Railway Transport "Ukrzaliznytsia"

WTO – World Trade Organisation

Infrastructure Monitoring for Ukraine (IMU); No. 5/2003

Boris Dodonov, Christian von Hirschhausen, Ivan Poltavets, Ferdinand Pavel, Oleksandr Shcherbakov

Table of contents

Foreword

This report is the fifth edition of "Infrastructure Monitoring for Ukraine", developed by the Institute for Economic Research and Policy Consulting on the basis of the EBRD methodology. The report presents information on the restructuring of six infrastructure sectors of the Ukrainian economy in a standardized manner, which allows for cross-industry comparisons. Monitored indicators are qualitative and fall into three broad categories: (1) commercialisation, (2) tariff reform, and (3) regulatory and institutional development. Twenty-one indicators allow for economic and policy-making analysis at different aggregation levels. The indicators are constructed in a way that represents the status of the reforms in each sector at a given moment in time.

A short executive summary outlines the major developments within selected sectors of the infrastructure. A general analysis of the Ukrainian infrastructure policies is presented in the second section. This detailed review of the reforms in each of the six sectors includes not only an ex-post analysis, but also an outline of the major challenges to future 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 evaluations in tabular form and provide methodological explanations and detailed comments for each indicator.

An extensive discussion of the methodology employed was presented in the first issue of IMU.[1] Several marginal changes were introduced in the second issue when more complete information became available to assure time-consistency and cross-industry comparability of the indicators.[2] Up to now IMU was issued twice a year, from now on it will be issued once a year.[3]

1 IMU No. 1, June 2001, see also IERPC Working Paper No. 8 [http://www.ier.kiev.ua/English/WP/2001/WP2001_eng.html].

2 See IMU No. 2, November 2001.

3 This "Infrastructure Monitoring for Ukraine" is the last one in the biannual series. From now on the reports will be issued on an annual basis. The next issue will be published in June 2004 and will cover the period June 2003 – May 2004. Thereafter each report will cover a whole years. The authors believe that the new time schedule should help the IMU reporting to better suit its purpose.

1 Summary

Despite a lack of substantial structural changes (privatisation, vertical unbundling, establishment of an independent regulator) most infrastructure industries demonstrated moderate success towards adjusting their performance to market requirements. While the overall reform progress can be evaluated as slightly positive, the railway industry, which had been one of the poorest reformers, demonstrated substantial progress towards market reform. On the other hand, the gas industry continued to be resistant to implementing market reforms. In general, the most urgent reform requirements outlined in the previous issues of IMU still remain unaccomplished.

The indicator for the ***Telecommunications*** sector has slightly increased from 2.26 to 2.29 due to positive developments in the operations and ownership categories. However, the reforms again bypassed some major problems in the sector. Attempts to introduce some potentially positive reforms have failed so far, like establishing a new order of inter-operator payments or divesting the state management rights in Ukrtelecom from the State Committee on Communication and Privatisation. Finally, expected changes in the underlying legislation, e.g. the eventual adoption of a law abolishing charges for incoming calls, urgently require acceleration of reforms in adjacent fields, such as a regulation on interconnection, establishing an independent regulator, and many other reforms, most of which are contained in the draft law on telecommunications.

For the ***Railway*** sector the indicator increased from 1.56 to 1.87. Some structural reforms started in earlier periods have proved to be successful: Ukrzaliznytsia was able to cover its costs, including the cross-subsidization of passengers, through tariffs. Freight rolling stock is starting to be sold to individual corporations. External financing is likely to be secured. However, progress is mixed, as attempts to create an independent regulator for the sector have failed. Also Ukrzaliznytsia is gradually becoming more involved in financing non-core activities, such as road building and airplane construction. The progress of railway reform thus far also implies that the use of the EBDR loan within its Second Ukrainian Railways Development Project will have to be monitored particularly closely.

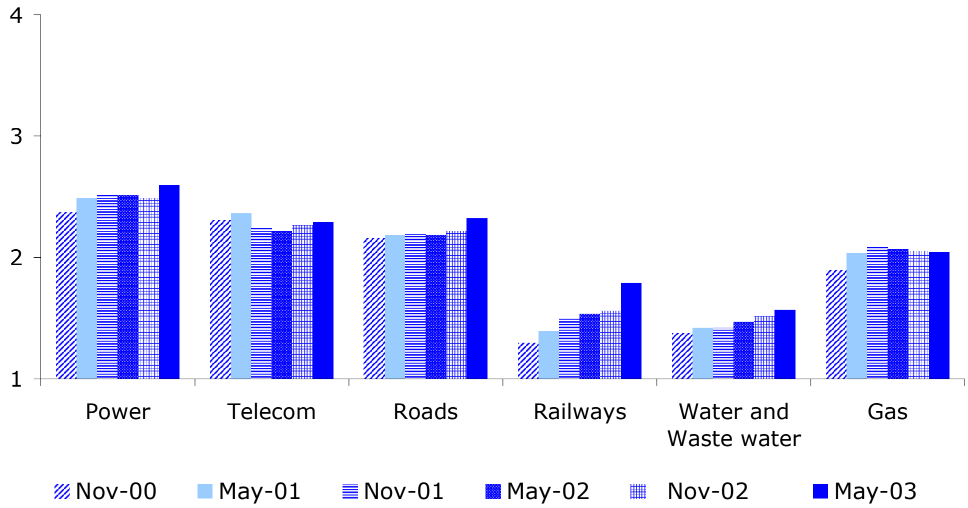
The ***Road*** sector's indicator increased from 2.21 to 2.32. State financing of this sector in 2003 has improved, though it still remains inadequate to prevent deterioration of the infrastructure. The Ministry of Transport has come up with a project, which could encourage more road construction in Ukraine: a state toll-road between Kyiv and Odessa is now under discussion. The plans to construct this toll-road led to reconsideration of the legislation on road usage and construction. Local governments have started to conduct tender procedures for servicing city bus routes.

The reforms in the ***Power*** industry between December 2002 and May 2003 were moderate, but improved competition in the potentially competitive segments of the industry resulted in the indicator's increase from 2.49 to 2.60. Privatisation of the regional power distribution companies (oblenergos) and of the power generating companies was postponed for an indefinite period. Cross-subsidisation of one customers by another persists and will increase after the new company that obtained a licence to supply electricity to the coal mines will start operating. The legislative framework on NERC performance aimed at guarantying its independence from political influence was not improved.

The ***Gas*** industry indicator decreased from 2.05 to 2.04 because competition in this potentially competitive market segment has further declined. Naftogaz now has a 100% monopoly at the wholesale market after Itera was pushed out off the market. Naftogaz and Gazprom continued working on the creation of a joint consortium for managing and developing Ukraine's gas transit system. No details were disclosed to the public. Although a number of major consumers of Russian gas proposed to enter the consortium as third-party investors, they were excluded from the negotiations at this stage. The power generation and heating enterprises drastically decreased payments for consumed natural gas during the first quarter of 2003. Although the payment discipline improved later on, most of the payments were done through subsidies and privilege settlements. The absence of cost reflecting tariffs, the lack of a legislative framework for market regulation and the absence of competition enforcement remain major problems for this sector.

The indicator for the ***Water and Wastewater*** industry increased from 1.51 to 1.57. The rate of payment collections from households has improved slightly, averaging 83% for January to April 2003 (several regions showed more than 100% payments reducing household indebtedness for services). The Committee for Public Utilities becomes more active in the sector: it has received the right to license the water companies in cities with more than 100,000 inhabitants: licensing could be used as a leverage to enforce regulations in the sector. The sector managed to attract investments from the World Bank. A USD 24 m loan will be used to improve the water supply in Lviv.

Graph 1
IER infrastructure indicators for Ukraine



Source: own estimations
Note: the indicators in this graph are presented without rounding, unlike in the table summarizing the indicators. This allows smaller changes to be seen

2 Ukrainian infrastructure policies, December 2002 – May 2003

The common denominator for four out of the six infrastructure industries (power, telecommunications, roads and water and wastewater) covered by IMU is a minor improvement in their performances. Only the reforms in railways industry were substantially accelerated. At the same time, the gas industry proved to be resistant to any reform (see Graph 1).

The railway restructuring initiatives started in previous periods have substantially improved the financial sustainability of the industry, and allowed it to secure external financing. Railway freight cars were starting to be sold to individual corporations. On the other hand, Ukrzalinytsia has become involved in financing several non-core activities like road building and airplane construction. The increase of the power industry's indicator can be mainly attributed to enhanced competition in the generating and supply segments of the industry. The indicator for the roads industry was upgraded due to improved state financing, the first toll-road construction, and introduction of tendering procedures for servicing city bus routes by local governments. The slight increase in telecommunications was due to positive developments in the operational and ownership categories. The water and wastewater industry's indicator was upgraded because of increased payments discipline, increased power of the State Committee for Public Utilities, and for attracting external financing into the industry. The established monopoly of Naftogaz at the wholesale gas market combined with the decreased payment discipline of power generating companies and heating enterprises resulted in the decline of gas industry's indicator. Full compensation for gas supplies to households receiving privileges and subsidies only partially compensated for the rating decline in the industry.

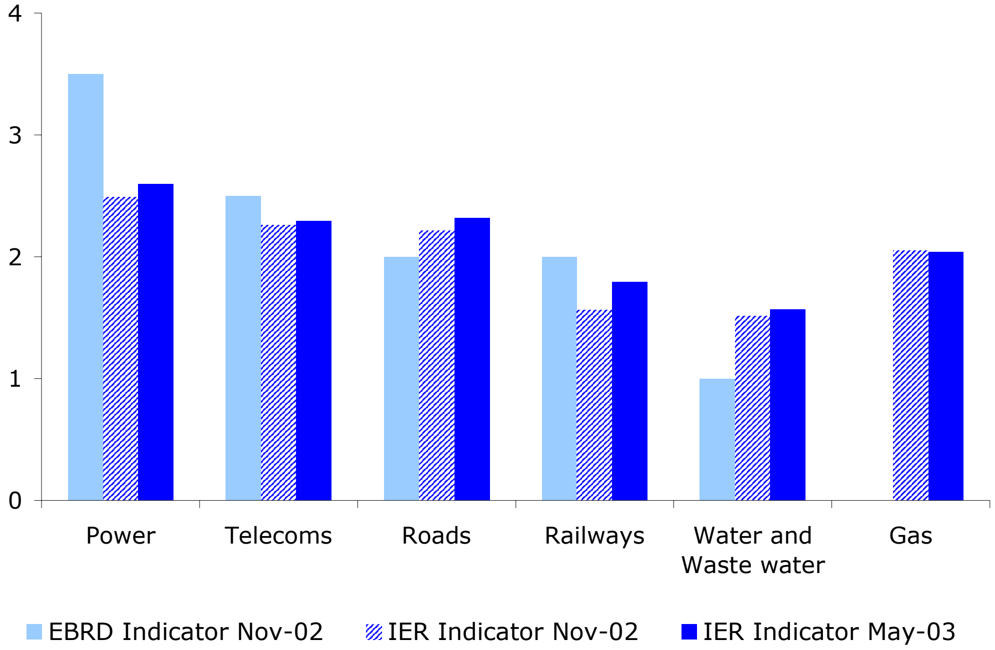
It is useful to compare our indicators with those of EBRD: (see Graph 2).[4] Among all industries, only the gap between the IER and the EBRD indicators in the railways industry is substantially contracting as management of that industry improves. In the telecommunications and power industries only a small contraction of that gap was observed. In all other industries covered by the IER and EBRD infrastructure monitoring the gap increased despite similar methodological approaches. As discussed in the previous issue, the largest gaps are observed in the power and the water and wastewater industries. In our opinion, the gap in the power industry is mainly attributable to methodological differences, while EBRD's grade for the water and wastewater industry is likely to be underestimated since many of the industry's characteristics correspond to score 2 and some characteristics of score 3 according to the EBRD classification system.[5]

---

4 See IMU No. 2, November 2001 and IMU No. 1, May 2001 for comments on the differences of approach.

5 EBRD classification system for transition economies. EBRD Transition Report 2002, p.34. For a detailed discussion on the gap between the IER and EBRD

Graph 2
Infrastructure indicators for Ukraine: Comparison between IER and EBRD indicators



Source: EBRD (Transition report, 2002); own estimations

The lack of a legislative framework for market regulation and competition enforcement remains the major problem for all infrastructure sectors. However, the number of steps aiming at improving regulations in the infrastructure industries initiated in 2003 is likely to increase in 2004. The government tried to establish independent regulatory agencies for telecommunications and transport, but these attempts failed due to strong resistance by the management of these natural monopolies. However, strong pressure coming from market operators and consumers of these services may lead to an improvement of the regulatory situation in 2004. Thus, the pressure from market agents has already resulted in the adoption in first reading of a very progressive draft law "On telecommunications" that would allow solving many of the major urgent problems within the industry.

Unresolved problems continue to put the sustainability of infrastructure services supply at risk. Cross-subsidisation is still widespread in most industries, and policies persist to establish tariffs, which do not cover costs. Once the presidential elections of October 2004 approach painful political measures like abolishing cross-subsidisation and increasing tariffs to cost-covering levels will not likely be attempted. In spite of the favourable political environment resulting from the parliamentary elections of March

indicators in the water and wastewater industries see IMU No. 4, December, 2002 Concerning detailed explanations of the methodological differences between the EBRD and IER indicators of infrastructure restructuring in Ukraine as well as the values of these indicators see IMU No. 4, December 2002, IMU No. 2, December 2001 and IMU No. 1, June 2001, available online at [http://www.ier.kiev.ua/English/imu_eng.cgi].

2002 political dissention seemed to prevent the introduction of such measures. Yet, if reforms are to be made, they must be made in 2003!

2.1 Telecommunications

2.1.1 Reforms, December 2002 – May 2003

Many of the reforms in the telecommunications sector of Ukraine, which were initiated in 2002, continued during the first half of 2003. Besides, it seems that some of the reforming activity in the sector resurfaced from within different government authorities, this went in line with the stirring up of business development. However, this progress has not affected the most important problems yet. Many of the developments can be evaluated as intents rather than real reforms, which would represent solutions to the major problems in the sector. Nevertheless we will devote some attention to these developments in the hope that they will eventually lead to the desperately needed changes in the near future.

The Russian company MTC continued its penetration of the Ukrainian telecommunications market, purchasing 25% of the UMC stock and announcing its intent to execute a call option for the purchase of the remaining stock in the forthcoming months[6]. This represents clear evidence that the ownership structure in the mobile segment has improved. Ukrtelecom transferred all cash flows from the sale of UMC to the state[7]. Previously it had been assumed that 30% would be directed to Ukrtelecom and 10% to the Ministry of Defence. At the end of May, the telecommunications joint venture "Optima Telecom" purchased two internet providers in the Zaporizhzhia region ("Komint" & "Marka"), which led to an increase of the company's share in the regional market for internet services to 75%. Besides, the company also purchased 24.5% of the Ukrainian Radio Systems (WellCOM) shares. This can be treated as a continuing consolidation tendency in the Ukrainian telecommunications sector. Yet, no significant progress was achieved in the long-awaited privatisation of Ukrtelecom[8]. The Presidential proposal to transfer the management of the state's corporate rights in Ukrtelecom to the State Property Fund, which could help with alleviating the problem of conflicting regulatory and business functions at the SCCI, was abandoned upon a recommendation by the SPF.

6 In mid-June it became known that the transaction was successfully completed and MTC had acquired control over 83.7% of the UMC stock. The serious interest of the Russian company in the Ukrainian telecommunications market can also be seen by the fact that MTC also purchased LTD "PTT Telecom Kyiv" (Kyiv).

7 Ukrtelecom transferred about UAH 400 m from the first transaction to the state. At the same time, even this remarkable sale faced several difficulties: the Prosecutor General started and closed a criminal case against top officials of Ukrtelecom relating to delays with the money transfer to the state, this delay has since been linked to the suit against one of Ukrtelecom's shareholders.

8 According to Interfax the President of Ukraine considers this privatisation as undesirable.

The recent resolution, following long standing disputes between the shareholders of Ukrainian Radio Systems (WellCOM)[9], and attempts by DCC to penetrate the mobile segment by purchasing another licensed company (Astelit), could lead to the emergence of a third large mobile operator in Ukraine. While there is a growth potential for the mobile communications segment due to a long (about 2.4 m) waiting list for fixed telephone installations, the huge investments and the time required to expand the network in most of the regions of Ukraine makes this unlikely in the short-run. Nevertheless, the information war between the two rivals - DCC and WellCOM - has already been started.

Parliament overrode the presidential veto on the law abolishing charges for incoming calls, which the President then signed on February 20. Thus, the law will come into effect at the end of the summer of 2003.[10] This generally positive development may be undermined by the poor regulations governing interconnections between operators, including inter-operators payments. While some reform attempts in this direction were made, they are hardly sufficient. In particular, on February 10, the SCCI adopted new rules on inter-operators payments for long-distance and international calls and about a week later revoked them. A special working group will be created to revise the rules. According to SCCI decree No. 28, these amendments will include compliance with EU and WTO requirements, as well as more complete conformity with the recommendations of the International Telecommunication Union (www.itu.int).

Some signs of positive developments within the regulatory and institutional framework of the telecommunications sector were noted. In particular, the Ukrainian parliament adopted the draft law "On telecommunications" in first reading. The document assigns an independent status to the National Commission on Regulation of Communications (NCRC) as opposed to the alternative draft, which stipulated that the NCRC should be a subdivision of SCCI. Besides, the CMU has the intention to establish a national commission on monitoring of radio frequencies, which is of great importance, taking into account the limited number of available frequencies, poor control by the government over issued but not used licenses, and the long time required to free up radio frequencies now reserved for the Ministry of Defence. Also, according to the head of the AMC, Oleksiy Kostusev, the government has approved draft decrees on establishing national commissions for regulating the telecommunications market and has passed them on to the Presidential Administration[11]. Upon request by the CMU, the President of Ukraine replaced Nikolay Honchar in the position of head of the SCCI by Oleg Yatsenko. Among the reasons given for Honchar's dismissal were that he blocked the establishment of an

9 At the beginning of 2003 the South Korean company Daewoo sold its shares in the mobile operator company CJSC "Ukrainian Radio Systems".

10 Another amendment to the present legislation was the introduction of payment by subscribers for full tariff time units of telephone conversation only, disallowing rounding to the next higher amount.

11 At the same time, it is worth noting that political influence on decision-making in the sector is likely to persist. In particular, the deputy general director of Ukrtelecom, Alexey Savchenko, was assigned as an advisor to the Prime Minister, according to the government's decree of April 3, No. 455.

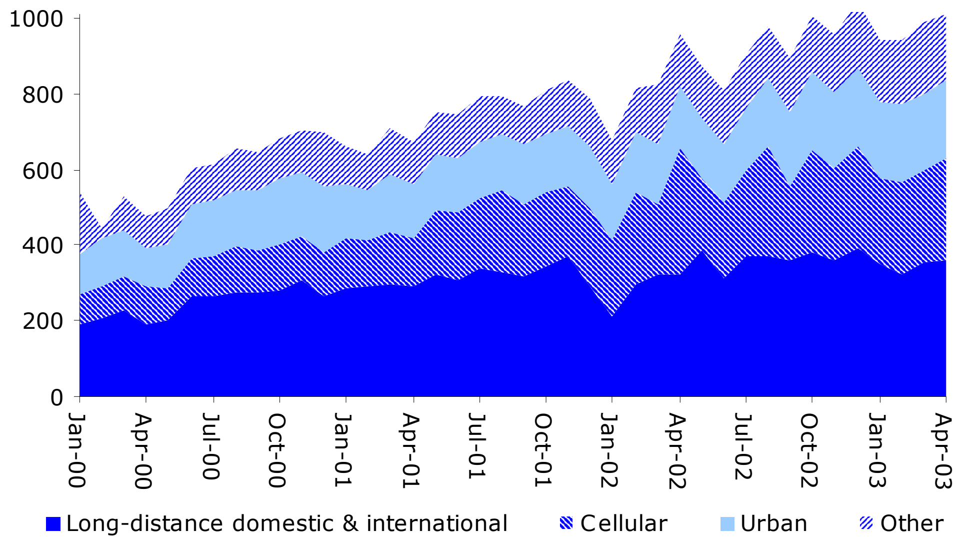
independent regulator for the sector and his inability to provide a competitive environment within the sector.

Restrictions imposed on the operators of IP-telephony by the SCCI and nine international call operators attracted the attention of the AMC. At the beginning of May, the AMC recommended to the SCCI to eliminate the restrictions on the activities of IP-telephony operators. The lack of procedures for licensing internet telephone operators (which have to be different from those for licensing international call operators due to different technology and service quality standards) makes it impossible for the operators to comply with the SCCI requirements. Thus, if effective, the proposed AMC measures could restore competition and significantly reduce costs to the final consumers. In addition, this may lead to the improvement of the regulatory environment, provided the appropriate rules are quickly adopted. At the end of April, the AMC also proposed to the SCCI to establish clear deadlines for interconnecting telecommunications operators. Currently, such deadlines exist only for a part of the interconnection procedures (issuance of technical conditions for connection projects), while operator willing to restrict access to others may delay other stages of connection. In general, the deeper involvement of the antitrust authority in regulating the telecommunications sector in resent times testifies to the gradual steps being taken towards liberalizing the market. Moreover, within the poor regulatory environment of the telecommunications sector, the SCCI and the AMC often pull in opposite directions. In particular, while the SCCI defends major state-owned telecommunications operators that fulfil legislated social obligations and hence are in an inferior position compared to their private counterparts, the AMC opposes any administrative intervention that may distort fair competition.

As announced by SCCI, Ukraine will introduce labelling of mobile telephones as of May 1. At the beginning of April, the deadline was moved to August 1 to let the market agents better prepare for the changes. The measure is designed to tackle smuggling and other types of economic crime, which put licensed distributors at a disadvantage compared to their shadow rivals. It is also aimed at increasing tax revenues from the importers.

Finally, the electronic circulation of documents and electronic signatures were allowed in Ukraine through the adoption of a law. This development fills the gap between the legal framework and a changing information environment. It should also stimulate the use of progressive technologies in all fields of business and of governmental activity.

Graph 3
Revenues in the telecommunications sector, UAH million



Source: Business Week, own calculations

Taking into account the positive changes in the ownership structure of UMC and the organisational separation of the potentially competitive enterprise from the natural monopoly, as well as the increased amount of services and the new investment from private enterprises into the potentially competitive segment of the telecommunications market, allowed the indicators for ownership, operation and organisational structure to be increased.[12]

2.1.2 Prospects

In the telecommunications sector the progress of reform was evaluated as marginal, because the most urgent problems had simply been avoided. Thus, the reform agenda remains almost unchanged. First of all, the long-awaited law "On telecommunications" needs urgently to be adopted and accompanied by the immediate establishment of an independent regulator. In this respect, particular attention should be devoted to dividing the responsibilities between the regulator and the AMC, in order to avoid duplication and to address the regulatory tasks in the most efficient way. Secondly, improvements to the legislation on interconnection are urgently needed: the outdated payment system for connecting up new business customers must be replaced, and a unified procedure for interconnecting operators needs to be instituted. Thirdly, further liberalization of the market requires the licensing procedures to be revised and controlled. New

[12] In particular, the ownership indicator for potentially competitive businesses was increased from 2.7 to 3.0, the indicator for private sector participation in service contracts was increased from 1.7 to 2.0, and the indicator for the organizational structure of potentially competitive businesses was increased from 2.0 to 2.3. More in-depth explanations with respect to particular indicators are presented in Appendix 3 (section "Telecommunications").

licenses should be issued under transparent tender procedures, which insure that the applicants have the necessary resources at their disposal. This should be accompanied by the introduction of strict rules on mutual payments between operators. Finally, reducing Ukrtelecom's social obligations would ease the introduction of private management and boost the company's efficiency.

2.2 Railways

2.2.1 Reforms, December 2002 – May 2003

The positive developments of reforms within the railways industry have started to bear fruit. Ukrzaliznytsia (UZ) now puts profits and efficiency at the top of its priorities. Corporatisation of the enterprises within the sector and restructuring within the industry have made the flows of funds more transparent, however, much more remains to be done in this regard. New services are being developed and their quality improves. UZ becomes more successful in securing external finance. EBRD is likely to take part in the financing of UZ's investment activities. Within a joint project EBRD would extend a loan of USD 120 m to UZ to finance the purchase of passenger carriages; the purchase of track machinery, the construction of the Beskyd tunnel and consultancy services[13]. UZ continued to pursue an aggressive investment strategy: among other projects, a high-speed train line between Dnipropetrovsk and Kyiv is under construction and is slated to be completed by the fall of 2003. This project is part of the wider activities to create faster railway connections in Ukraine: the project is financed from internal funds of UZ.

Despite significant progress in restructuring and efficiency improvements, UZ continues to increase its participation in non-core activities. A trend opposing unbundling is very noticeable in the railways sector.[14] The Cabinet of Ministers of Ukraine (CMU) continues to transfer management responsibilities for unrelated enterprises to the State Railway Transport Administration (UZ). This development has its pros and cons. On the one hand, it slows down the process of privatization of the railway's ancillary enterprises. On the other hand, given the poor performance of the 'outside' enterprises and the insufficient regulatory framework surrounding them, transferring them to the management of UZ might lead to substantial improvements, which in turn might help making them more attractive for subsequent privatization.

The CMU allowed the statutory fund of the leasing company Ukrtransleasing, managed by UZ, to be increased by UAH 409 m to UAH 630 m. The money and railway rolling stock (totalling at least UAH 230 m) will come from UZ's own funds and will partly be used to pay for the

[13] Second Ukraine Railways Development Project (http://www.ebrd.com/projects/index.htm)

[14] However, the railways continued to transfer spur lines to the enterprises they serve. This is a positive development towards unbundling of the railway infrastructure.

construction of airplanes at the Kharkiv State Airplane Construction Enterprise.[15]

The President of Ukraine[16] decreed the transfer of the railway troops, formerly controlled by the Ministry of Defence, to the control of the Ministry of Transport. The existence of these forces is of doubtful value for national defence, but to avoid their disbandment, they were simply transferred to a different ministry. It is very likely that UZ will now incur additional outlays for maintenance of these troops. The rationale for all this is not clear: troop management is definitely not one of the core activities of the Ministry of Transport.

UZ will become one of the investors/managers for the building of the toll road Kyiv-Odessa[17]. The UZ management was seeking ways to secure external financing. Hence, the South-Western Railway (a regional unit of UZ) issued three-year bonds in the amount of UAH 500 m with monthly coupon payments and an annual yield of 12%.[18] Ukrsotsbank was chosen as the lead-manager for the issue, and the NBU agreed to accept these bonds as collateral refinancing loans to the banks.

Again, the evaluation of those developments is rather mixed. On the one hand, issuing bonds will require the railway to publish a financial statement thereby contributing to increased transparency in the sector. On the other hand, the involvement of the NBU for refinancing purposes at an interest rate below market levels (according to NBU Bulletin No. 4 of 2003, the average interest rate for long-term credits in the 1st quarter of 2003 was about 18%) indicates that this step cannot be seen as a "real" acquisition of private capital but rather as a politically motivated decision that comes at a high macroeconomic risk.[19]

As can be seen from these examples, UZ is gradually acquiring a quasi-corporate status with diversified activities. On the one hand it issues bonds and behaves like a corporative entity, choosing its investment projects. On the other, however, its relationship to the government as the corporate owner remains unclear. This inconclusive status remains to be tackled by corporatising the Ukrainian railways.

In December 2002, the railways raised their freight tariffs for certain goods, the overall average rise amounting to about 14.8%. This was partly explained by the need to cross-subsidize other spheres of activities. Following the tariff increase the CMU, urged by railway freight customers,

---

15 CMU Decision N 351, March 17, 2003.

16 Decree of the President of Ukraine "On transfer of the Railway Troops of Ukraine to the control of the Ministry of Transport of Ukraine" (N46, January 27, 2003).

17 For more information on the toll-road construction, please consult the Roads section.

18 By its Order "On the development of the international transport corridor N9" (N271-p, May 15, 2003) the CMU obliged UZ to become the managing and financing institution for the construction of the Kyiv-Odessa road. Ukravtodor is to repay UZ the debts by 2006.

19 The German Advisory Group and the Institute for Economic Reforms and Policy Consulting have frequently criticized various refinancing efforts of the NBU. See for instance Advisory Paper S9 at www.ier.kiev.ua/English/papers/s9_en.pdf.

tried but failed to create an independent regulator body for the transport industry. As long as there will be no regulator, railway customers will lack the power and leverage to resist tariff increases, which could seriously damage the railway's relationship with its customers.

Despite the tariff increase at the beginning of the year, freight transportation increased by 13% between January and April 2003, as Table 1 shows. This increase can partially be explained by improvements to the railway system and new services, which attracted new customers. The growing industrial output in Ukraine, causing an increased demand for railway transportation services is likely to be another reason.

Table 1
Passenger and freight railway transportation from June 2002 to April 2003

	June 2002-April 2003	Percentage change, 2002 (year over year)
Passengers, m	148.3	+0.1
Passenger turnover, bn passenger-kilometres	14.2	-0.8
Freight, m tons	134.5	+13.0
Commodity turnover, bn tons	68.7	+16.7

Source: Derzhkomstat

The only agency that can challenge the monopolistic status of UZ today is the Anti-Monopoly Committee (AMC). The AMC opened a case against UZ on the grounds of that it provides preferential treatment for forwarding agents. The AMC found that out of 89 forwarding companies that have contracts with UZ, 18 companies are getting discounts, the reasons for this preferential treatment being non-transparent. This type of occurrence will most likely persist until an independent national regulator has been set up.

Although many of the developments in the industry remain ambiguous, the optimisation progress of the sectoral structure, cost coverage, management efficiency improvement, and attracting outside financing have permitted to increase the overall indicator for the railway sector.[20]

2.2.2 Prospects

Although the railway sector is marked by the dynamic development of new services, improvements in the quality of existing services, and high investment activity, the crucial task of structural reform remains to be tackled. The tariffs increases were used for increased cross-subsidization activities within UZ. The subsidized spheres include passenger transportation, investment projects within the railway core activities as well as non-core ones, such as financing of airplane and road construction. UZ is becoming more and more involved in projects outside of its main scope of activity. UZ increases its monopoly rent through tariff increases for freight transportation and redistributes it to sectors other than railway transportation. Although the cross-subsidization of passenger transportation by freight transportation is officially justified by the social

[20] More detailed explanations concerning particular indicators are presented in Appendix 3 (section "Railways").

commitments of the railways, inter-sector redistribution of wealth could lead to increasing efficiency losses within the economy.

Since UZ already acts like a quasi-corporation, it would be beneficial to start the official corporatisation process, leaving 100% of stocks in state ownership. The improved clarity of the relationships in this case would facilitate the securing of external financing by UZ, and would clarify its relationship to the owner (the state). This step should be coupled with the creation of an independent national regulator for the transport industry to introduce accountability and transparency.

Since railway customers are permitted to own rolling stock, the tariff policy should accommodate this option by defining clear terms and conditions for access to the railway network.

2.3 Roads

2.3.1 Reforms, December – May 2003

There were no significant developments in the roads construction and maintenance sector. Improved state financing is still below the level required to prevent the deterioration of the roads in Ukraine. Road transportation may become more competitive once local bus routes will be allocated to private companies through tendering.[21] Some innovative ideas began to appear lately on how to unblock the stalemate in the road construction sector.

The Ministry of Transport has come up with a project of constructing a state-owned toll road between Kyiv and Odessa (454 km). The first stage of this project foresees the construction of the 282 km sector between Zhashkov (Cherkas'ka oblast) and Chervonoznamenka (Odes'ka oblast). This road is part of the international transport corridor N9. Parts of the current Kyiv-Odessa road[22], which needs to be reconstructed to improve its quality, will eventually become part of the toll-road. A toll-free road will be constructed parallel to the toll-road, so as not to constrain the choice of the drivers.

Financing of the project will require about UAH 2.16 bn.[23] These funds will come from investors outside the Ukrainian road sector. The first UAH 500 m will be secured through the South-Western Railway, which will issue bonds for this amount.[24] The official reason for this inter-sectoral investment is the inability of the Ukravtodor to provide collateral for the loans, while Ukrzaliznytsia has sufficient revenues and assets to guarantee the bond payments. Further negotiations are carried out with potential investors to secure the remaining funding.

21 More detailed explanations concerning particular indicators are presented in Appendix 3 (section "Roads").

22 Parliament has adopted a special law regulating the terms and conditions of the highway's construction.

23 Financing of this type of project is not feasible using state funds only. The consolidated State Budget for 2003 foresees UAH 2.3 bn for financing the entire road sector.

24 Please consult the Railways section for additional information.

The income from the new Zhashkov-Chervonoznamenka toll-road will be directed towards repayment of the loans, while the income from tolls on the already existing parts of the Kyiv-Odessa road will go directly to the state. It remains unclear though, how in the absence of a road fund item within the budget, maintenance of the toll-road will be assured. For instance, the proceeds from this toll-road could be used as collateral for loans for the construction of other toll-roads. Nevertheless, the building of this first state toll-road represents a significant breakthrough in the Ukrainian approach to road construction, ownership, operation and usage.

There are some positive developments concerning potentially competitive businesses using the roads. The Kharkiv and Cherkasy local governments announced the issuance of tenders for servicing their local bus routes. This will apply to 20 routes in Kharkiv and for 8 routes in Cherkasy. Although private companies already operate bus routes in many cities of Ukraine, the announcement of open tenders is a positive sign for increasing transparency.

During the past half year, the management conflict within the Association of International Road Transporters in Ukraine (AsMAP) has reached a peak, which could endanger not only its image in the international arena, but potentially lead to difficulties in obtaining certification from Transports Internationaux Routiers (Carnet TIR). Poor regulations governing the organisation of international cargo truck transportation continues to plague the industry.

2.3.2 Prospects

Having adopted the law regulating the terms and conditions for the Kyiv-Odessa highway construction, Parliament and the Cabinet of Ministers will have to introduce additional changes to the legislation of Ukraine, especially concerning tariff setting and redistributing the proceeds from operating the highway. The Cabinet of Ministers has already adopted a Decree "On the adoption of the methodology for calculating concession fees for the construction and exploitation of automobile roads". This methodology increases clarity in the domain, however the new approach concerning state-financed toll-road construction and the levying of tolls on existing state roads raises many other issues yet to be settled.

Assuming that state financing of the road sector in Ukraine is adequate to prevent deterioration of the existing road infrastructure, new approaches need to be devised to increase financing within the sector. For next year's budget it would be advisable to ensure that the road sector is financed directly from revenues closely tied to road usage. The present Ukrainian legislation[25] foresees that excise taxes and custom duties collected on imported oil products, vehicles and tires are to be assigned to financing the road sector. The law's intent was however not observed during the past three years, and income from these sources was only in part directed to the road sector. Due to the critical situation in the road sector it would be advisable to amend the legislation in order guarantee increases in the special budget fund. The fuel tax (excise tax) should also be included as

[25] Law of Ukraine "On the sources of road sector financing", Article 3. (N1562-XII, September 18, 1991).

one of the sources for financing the sector from 2004 onwards. The proceeds from this tax should be budgeted only for the special road fund.

Ukravtodor should also make additional efforts to open its tendering procedures to participation by private companies. Subcontracting in the industry should follow standardized procedures and be open to public scrutiny.

2.4 Power

2.4.1 Reforms, December 2002 - May 2003

Many important structural reforms in the power sector, such as privatising the natural monopoly and potentially competitive segments of the market, abolishing cross-subsidisation, and developing legislation to strengthen the independence of the regulatory body were suspended during the period from December 2002 to May 2003. At the same time some positive developments towards increasing productive efficiency in the industry were observed.

Real competition at the wholesale power market was observed for the first time. The now substantially improved payment discipline allowed most power generating companies to solve their fuel supply problems, and to start competing by participating in the pool bidding system. A private company Vostokenergo, that currently owns three power-generating stations, which it acquired in 2001 through a debt equity swap,[26] demonstrated the greatest willingness to work in a more competitive environment.[27]

The number of independent suppliers has increased substantially compared to previous periods. The demand for independent suppliers increased after many large industrial customers realised that they would be able to reduce their costs if they were not subject to the NERC supply tariff. Thus, they started acquiring electricity from independent suppliers but the number of customers who switched to independent suppliers so far is very small. Because of these positive trends towards competition in the generation and supply segments, it was possible to increase the grade for "Private sector participation in service contracts" from 1.7 to 2.3, and that for "Potentially competitive business pricing" from 2.3 to 3.0.

The average level of cash payments by the oblenergos to the wholesale electricity market decreased to 84 to 88% during December 2002 to March 2003 (see Graph 4). However, it increased to about 98.6% in April and rose to 100.4% in May. This recent payment level increase is explained by the oblenergos enforcing a stricter policy towards non-payers and by a reduction of consumption by communal utilities (who are the major non-payers) due to a reduction of seasonal demand. In May 2003 only two oblenrgos paid less than 100% for electricity bought at the wholesale electricity market, which means that their strict enforcement resulted in

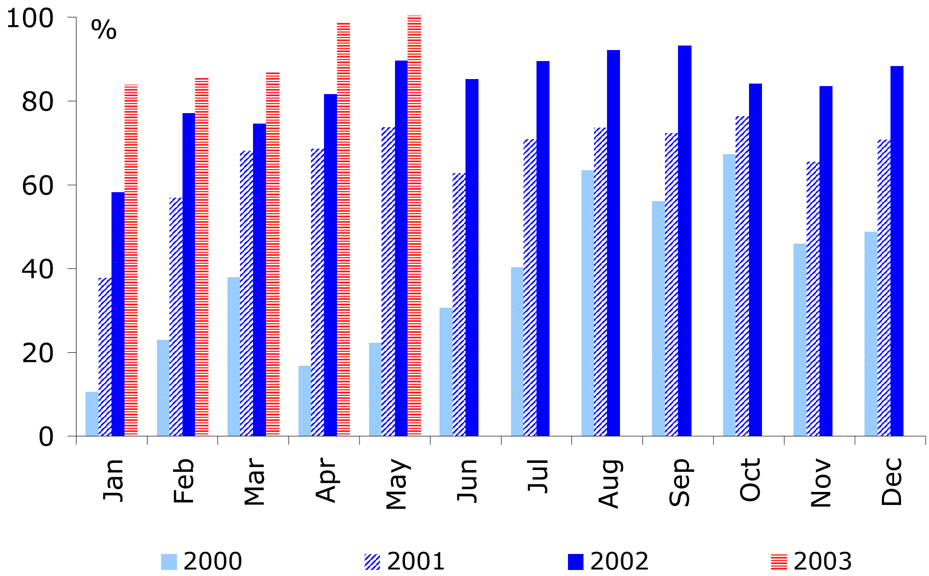
26 For the details of acquisition see IMU No. 2, December 2001

27 At the same time the absence of modern metering systems allowing measuring the instantaneous consumption at any time of the day prevents consumers to be billed according to the load curve.

debts redemption. However, Ukrainian legislation prohibits regional distributors from cutting electricity to a number of customers (mainly for ecological reasons). Thus, the targeted 100% will not be sustained as long as the oblenergos are not compensated for electricity supplied to such customers. First efforts to solve this problem were made in a law recently adopted by Parliament. However, this law still contains provisions prohibiting the disconnection of agrarian producers from the electricity supply. Also, the law is likely to be vetoed by the President.

Despite the rather high level of payments to the wholesale electricity market, power-generating companies drastically decreased payments for consumed natural gas during the first quarter of 2003. According to Naftogaz (the vertically integrated state-owned natural monopoly), they paid for 40.8% of the natural gas consumed and only 15% was paid in cash funds. Therefore, although the wholesale market received about 100% cash payment in April and May, this level resulted from debt redemption and the payment indicators could not be upgraded due to non-payment by a number of customers and weak payments for consumed inputs.

Graph 4
Cash payments by oblenergos as a percentage of their total electricity purchases



Source: NERC; Energobusiness

At the end of 2002, the Cabinet of Ministers adopted a policy directive regarding the performance and development of the wholesale power market in Ukraine[28] aiming at the creation of a competitive market according to current EU standards. This document correctly defines the key points of the power market deficiencies in the past, and proposes significant reform steps for the power sector. According to this document, a

28 Cabinet of Ministers decree, "On adoption of the concept regarding the performance and development of the wholesale power market in Ukraine", No. 1789, November 16, 2002.

bilateral contracts approach should supersede the existing pool model within the next five years. The five-year transition period is justified by the necessity to eliminate market distortions like non-payments, cross-subsidisation etc.

As in the past, privileges and subsidies to selected customers continue to be financed through indirect compensation. The losses incurred by the regional energy suppliers due to these privileges derive from the gas transit service fees, which Naftogaz is obliged to pay to the state.

It should also be pointed out that so far no steps have been taken to enforce competition at the market for primary resources. As will be discussed in the next section, Naftogaz controls the entire gas chain and is thus able to prevent the possible entry of competitors like Russian oil companies or Itera to the Ukrainian market. Coal extraction continues to receive huge subsidies and so far, only one coalmine was privatised. The reorganisation of the coal market has not yielded any benefits yet. Consequently, competition does not exist on the gas and steam coal markets.

The creation of a special fund to allow nuclear power stations to accumulate the necessary funds for their ultimate closure is still under discussion. The use of such funds is a common worldwide practice, and its creation in Ukraine would increase the price of the electricity generated at nuclear plants to a level comparable with that of electricity generated at fossil fuel plants, which would of course enhance competition within the industry. Furthermore, Energoatom still finances a huge social infrastructure, which should really be financed at the local level.

The National Electricity Regulation Commission agreed to issue a licence for transmission, distribution and supply services to a newly created company Ukrenergovugillja. This state-owned company was created upon a proposal by the Ministry of Fuel and Energy to supply electricity exclusively to coal mines. According to estimates by the ministry, this would allow coalmines to save about UAH 200 m per year, but the ministry has not disclosed the rational for such a large cost reduction. Furthermore, the legal aspects surrounding Ukrenergovugillja’s usage of oblnergo networks are not yet solved. According to oblenergo estimates, the tariffs for other customers would increase by about 10-15% after Ukrenergovugillja starts providing services to coal mines. The creation Ukrenergovugillja might also induce other industries to start demanding lower tariffs; in fact, agrarian producers have already asked for a return to the cross-subsidisation procedure that was abolished in 2002.

Public hearings have started to play a substantial role in NERC decision-making. Also, NERC legislation has become detailed and transparent, but some activities within its competence are still regulated by the Cabinet of Ministers (e.g. household tariffs). Legislation to increase the NERC’s independence was not approved during the period under review. Therefore, the grade could only be increased from 2.3 to 2.7.

2.4.2 Prospects

The government plans to continue with privatising the remaining state owned oblenergos and then start privatising the power generating companies. However, there is no consensus on the time schedule, on the procedures to be followed and on restructuring of the accumulated debts. Transparency of the privatisation process is essential in order to attract foreign investors and to avoid that assets will be sold via "cold" privatisations at lower prices.

The tariff policy should play a key role in solving the problem of financial sustainability of the sector. Tariffs should be raised to cost-covering level for all consumers, and cross-subsidisation must be abolished. At the same time, tariffs should be set in accordance with efficiency criteria, i.e. consumers should be charged for the costs of supply plus a reasonable rate of return. The NERC might replace the profit cap regulation by a price cap regulation that will initially provide the same rate of return but simultaneously will also provide stronger incentives for cost minimisation.[29]

Enacting the laws "On the NERC" and "On the wholesale electricity market" by parliament would improve the regulatory situation. Rules for ensuring the NERC's financial independence should also be included. A commonly used practice could be employed to achieve this, i.e. to finance the NERC out of a special fund in addition to direct state financing. This fund would be created by transferring a fixed percentage of the revenues of the market operators into it. Financing the NERC from two sources would increase its independence from political influence and avoid incentives for the NERC to unduly increase tariffs for market participants.

2.5 Gas

2.5.1 Reforms, December 2001 – May 2002

The natural gas industry proved to be resistant to all market reforms. Major structural reforms like its vertical unbundling, privatisation, and competition enforcement at the wholesale and retail levels appear not to be on the government's agenda. No public input went into the creation of the gas transit consortium with Gazprom and the development of its operational and legislative framework. The tariff policy and the regulatory framework also remained unchanged.

Ruhrgaz as well as other potential investors like Gaz de France who expressed interest in joining the consortium for managing the Ukrainian natural gas transit system have so far been effectively excluded from the Ukrainian-Russian negotiations. No details of the negotiations like the possible operational scheme, the obligations of both sides, and whether Gazprom would be willing to transit Caspian gas through its territory to Ukraine and Europe on a non-discriminatory basis were disclosed to the public. The absence of transparency and concealing the information on the future management structure of one of the most important Ukrainian

[29] The inefficiency of the current tariff policy was proven by an investigation by the AMC. The AMC revealed that six oblenergo included UAH 102 m of receivables in the tariffs, and five companies financed UAH 8 m charity through tariffs.

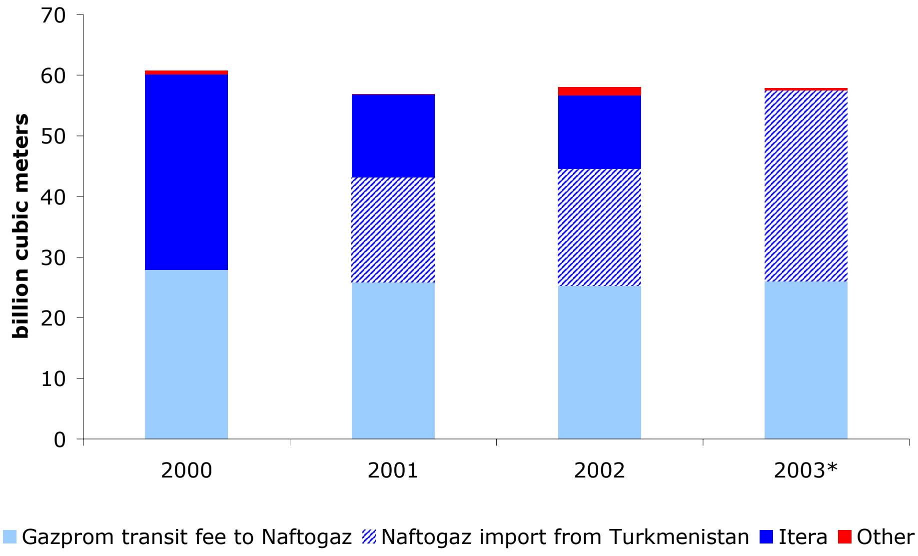
assets caused some members of parliament to make accusations of treason.[30]

Improved relations with Gazprom allowed Naftogaz to export 2.5 bcm of natural gas during the first quarter of 2003. According to the Head of Naftogaz, Yuriy Boyko, Naftogaz is going to export 6.5 bcm of natural gas in 2003, 5 bcm of which will be exported on Gazprom contracts. Until 2003 any export of natural gas from Ukraine was prohibited by the Ukrainian-Russian bilateral agreements (except gas exported according to the Yamburg agreements). Although Ukraine is the fourth biggest net natural gas importer in the world, it will only export the surplus gas obtained from Russia in payment for transit services, and gas imported from Turkmenistan. The management of Naftogaz also decided to acquire a share of the Hungarian company Eural TG that signed the contract with Gazprom in December 2002 on Turkmenian natural gas transit to Ukraine. Naftogaz suggested that Gazprom acquire a share of this company too.

The competition at the wholesale market decreased substantially after Itera had left the Ukrainian market in January.[31] As a consequence, Naftogaz obtained practically 100% control over the wholesale market (see Graph 5). In order to prevent abuse by the monopoly power of Naftogaz, the Cabinet of Minister's adopted a decree ordering the NERC to set up ceiling prices on natural gas for industrial consumers. At the same time, enforcement of an efficient non-discriminatory legislative framework for third-party access to the transportation and distribution nets would allow creating competition in this market and make the proposed regulation unnecessary.

Graph 5

Structure of Natural Gas Imports to Ukraine in 2000-2003



*Cabinet of Ministers forecast

Source: Cabinet of Ministers; Ministry of Economy; Energobusines

[30] For details about the creation of the international consortium see IMU No. 4, of December 2002.

[31] For Naftogaz's policy of crowding out competitors see IMU No. 4, December 2002.

As mentioned in the power industry section, both the power generation companies and the heating enterprises drastically decreased their payments for consumed natural gas in 2003. In response Naftogaz substantially decreased the gas supply to these customers and even completely cut off a number of power stations in May 2003. Although the generating companies improved their financial discipline in April and May, Naftogaz claims that 70% was paid by mutual settlements under subsidies and privileges, yet the company has to pay with cash for the Turkmenian gas supplied to it. According to the Ministry of Fuel and Energy, the total payments to Naftogaz amounted to 76% of the gas supplied between January and May 2003. Thus, the indicator "Final consumer collection ratio was decreased from 3.3 to 2.7. At the same time, state payments for privileges and subsidies to households exceeded 100%. The grade "State indebtedness" was increased from 2.3 to only 3.0 since most was paid by mutual settlements instead of a direct money transfers to Naftogaz.

In January the Cabinet of Ministers subordinated Naftogaz to the Ministry of Fuel and Energy and thus, Naftogaz started to be managed by its largest debtor (the power stations are subordinated to the ministry too). Then the President intervened in the conflict between Naftogaz and the ministry by issuing an order to transfer all property rights to the State Property Fund of Ukraine and to return Naftogaz to the Cabinet of Ministers. However, the order was not properly executed and some enterprises in the energy sector and other industries are still not managed by the SPFU despite the Cabinet of Ministers' claim that all property rights were transferred. At present all power stations fall under to direction of the Ministry of Fuel and Energy, while Naftogaz is subordinated to the Cabinet of Ministers.

The tariff policy has not changed. Tariffs for private households, budget organisations on all levels and for communal heating enterprises are much lower than those for industry. As a consequence of the low tariffs for these consumers Naftogaz is unable to sustain the required investment in maintenance and rehabilitation of the gas transit system. Naftogaz asked the government to increase the tariffs for industry, heating enterprises and budget organisations but no decision has been taken so far.

2.5.2 Prospects

The organisation and the operation of the consortium should be made more transparent. Special public hearings should be organised and their results must be seriously considered by the government. In order to ensure energy security and diversify of natural gas supply, Ukraine has to include additional provisions for gas transit through the territories of Ukraine and Russia in the agreement creating the consortium.[32]

In order to ensure competition within the industry Naftogaz must be vertically disintegrated into extraction, transportation and supply, all independent of one another. This would increase the attractiveness of the

[32] For the provisions that should be included in the agreement see IMU No. 4, December 2002 and Opitz, Petra; von Hirschhausen, Christian (2001). *Ukraine as a Gas Bridge to Europe? Economic and Geopolitical Considerations.* In: Hoffmann, Lutz, and Felicitas Möllers (eds.) (2001). Ukraine on the Road to Europe. Heidelberg, New York, Springer.

industry to foreign investors. However, it will be difficult to implement this proposal due to very strong resistance by Naftogaz.

Other necessary measures aimed at stimulating competition are to guarantee non-discriminatory access to the transportation networks for any potential natural gas importer, and transparent methodologies for determining access fees. The tariffs for final customers should allow the market participants to recover their costs and provide incentives to the natural monopoly for cost minimisation. In order to ensure 100% payment for supplied natural gas Naftogaz should cut the supply to all non-payers and the government should enforce support for these measures. Though these measures might be painful and politically unpopular, it will remain impossible to attract investment to the industry so long as the tariffs do not fully cover costs.

2.6 Water and wastewater

2.6.1 Reforms, December 2002 – May 2003

The reforms in the Ukrainian water and wastewater sector are extremely slow. Some developments are positive, however, the reforms so far lack a coherent approach. In part this is explained by the fact that the industry finds itself in a vicious circle, which inhibits restructuring and progress. The local governments exert significant influence on tariffs, putting a large social support function on the shoulders of the water companies, which worsens their poor financial situation. The State Committee on Public Utilities does not yet have enough political clout to enforce the regulations in the industry. The Committee is slowly becoming more powerful and is getting involved in developing a subprogram on water reforms, which will hopefully soon be adopted as part of the national program on reform of the communal sector. As one positive development, external financing is about to be made available, after the Verkhovna Rada ratified an agreement with the World Bank on financing the Lvivvodokanal modernization.

Water enterprises continued to face the problem of non-payment by consumers. As a result some water enterprises do not pay their debts for electricity and other inputs, which caused the oblenergos to start curtailing their electricity supply. The decisions to partially cut off the water enterprises from the electricity supply for non-payments is tacitly supported by central government officials as that seems to be the only way to motivate the payment discipline of communal enterprises. For instance, Rivneenergo recently curtailed the electricity supply to the Rivneoblvodokanal. Water enterprises in many oblasts already experienced such "disciplining" and managed to resolve the non-payments crisis. For example, in Poltavska oblast, where several years ago the water enterprise had also been partially cut from the electricity supply for non-payment, we now note a significant improvement. Not only do the payments cover current service fees, but the population even started to repay older debts. In April 2003 in Poltavska oblast the payment for the cold water supply was at the level of 111.3%. The main reason for this increased payment discipline was an active stance taken by the local government and the water enterprises, which supported promotion campaigns in the region and started to follow up more actively with non-paying customers.

The Cabinet of Ministers of Ukraine decided to extend to 2007 the Program for gradually equipping households with water and heat meters.[33] Originally the program was meant to end in 2000; however, its implementation did not reach planned levels. In 2002, for instance, only 10.9% of the cold-water meters had been installed country-wide, for the heat meters the figure was only 0.9%. The best results in equipping apartment houses with the cold-water meters in 2002 were shown in the city of Kiev (848 houses, 77.9% of the target level) and in Poltavska oblast (1,745 houses, 62.9% of the target level), whereas Rivnynska oblast, for instance, showed only 1.6% fulfilment of the program target.

In Kyiv, 17.5% of the shares in the open joint stock venture Kyivvodokanal were put up for sale at the end of 2002. The overall price of the bundle of shares for sale was UAH 30.6 m. The tender was scheduled for January 30, 2003; however, it was cancelled, as apparently the conditions of the proposal did not generate sufficient interest from buyers. Currently, the State Property Fund is working on a different proposal involving a sale of about 46% of the company's stock. This tender is not announced yet, however, the general trend towards attracting private capital in Kyiv seems to increase. The authorities of the city of Kyiv estimate that the investment needed to renovate the pipeline network in the city is around USD 500 m. The financial situation of the Kyivvodokanal is far from satisfactory (see Table 2): the estimated debt by the company to the state alone is about UAH 55 m.

Table 2
Main financial indicators of the OJSC Kyivvodokanal, in thousands of Hryvnia

	1999	2000	2001	9 months of 2002
Revenue	240,146.3	290,606.2	255,884.5	187,654.1
Profit before taxes	-1,929.7	63,147.5	9,678.6	2,711.8
Receivables	299,265.2	178,841.9	207,605.0	241,106.4
Payables	289,420.5	83,114.9	114,818.6	143,410.5
Profitability, %	—	30.8	6.8	4.3
Assets price	876,767.0	811,036.4	898,945.6	978,120.4

Source: State property fund tender announcement, 2002

In May parliament adopted changes to the Law of Ukraine "On VAT tax" allowing water companies to calculate their VAT at the time they receive payment for their services. The debts of the water companies vis-à-vis the state was constantly getting worse because the VAT was calculated at the time the service was rendered, rather than at the time when payment was received. For instance, the debt of Kyivvodokanal to the state at the end of the 2002 is about UAH 50 m.

The Verkhovna Rada has ratified the agreement for a loan from the World Bank to Ukraine. The USD 24 m loan will be used to improve the delivery of water and wastewater services to the customers of Lvivvodokanal. The

33 Order of the Cabinet of Ministers of Ukraine "On Extending the program of equipping households step-by-step with water and heat meters till 2007", N1957, December 25, 2002.

loan matures in 20 years and has a 5-year grace period. There are other smaller projects starting in Ukraine's water and wastewater sector with the participation of funds from international organisations.

The State Committee on Public Utilities is becoming more actively involved in the regulation of the water sector, although it still lacks direct control over the sector. Licensing of water enterprises is one of the leverages the committee has over water enterprises. Currently it is involved with drafting part of the national program on the reform of the communal sector.

A new trend in the sector was noticed when the Kyiv City government attempted to initiate a merger of communal enterprises (water, gas, electricity and others) into a multi-utility service company. This step was negatively received by the central executive agencies and experts working in the sectors. Creation of such a multi-utility company in the absence of powerful regulators in some sectors and in the absence of competition would create a non-transparent company, occupying a monopoly position on several markets, which could potentially indulge in inter-sector cross-subsidization.

2.6.2 Prospects

The positive tendency of tackling non-payment for services in the sector should be strengthened through spreading information about the positive results achieved in some of the most successful regions of Ukraine, in order to educate the more problematic ones. The low income of the Ukrainian population cannot serve as a sufficient explanation for the low payment rates for water and wastewater services. Improved collection practices could improve the financial situation of the water companies and make them more appealing in so far as private capital participation is concerned. First of all, the local governments could launch information campaigns in their regions directed at improving the payment discipline. Any non-paying customers should be contacted to discover the reasons for their actions. Well-to-do non-paying customers should be prosecuted in the courts.[34] Less well-off non-payers could be helped by securing for them targeted subsidies for communal services, of which they may not currently avail themselves because they may not understand the process of applying for and receiving the subsidy, or for any other reason.

During the last half year there were no significant changes in the operation of the sector, however, the government starts to pay more attention to the issue of communal reform, which is signalled by the development of a national strategy for such a reform and other supporting documents. One of the main tasks of the government for the future should be to develop a feasible plan for reforming the water and wastewater sector, and to strengthen the powers of the responsible executive body, most likely the Committee on Housing and the Communal Sector, which would be vested with implementing the reform strategy.

[34] The judgement could include the mandatory payment of the fee for services as well as of any prior debt by garnisheeing the wages of the non-payer.

3 Appendices

Appendix 1
Infrastructure Indicator evaluation

Indicator		Telecom						Railways						Roads					
		00-N	01-M	01-N	02-M	02-N	03-M	00-N	01-M	01-N	02-M	02-N	03-M	00-N	01-M	01-N	02-M	02-N	03-M
	EBRD indicator	**2.5**		**2.5**		**2.5**		**2.0**		**2.0**		**2.0**		**2.0**		**2.0**		**2.0**	
	IERPC indicator	**2.3**	**2.4**	**2.2**	**2.2**	**2.3**	**2.3**	**1.3**	**1.4**	**1.5**	**1.5**	**1.6**	**1.8**	**2.2**	**2.2**	**2.2**	**2.2**	**2.2**	**2.3**
1.0	**Commercialization and privatization**	**2.0**	**2.0**	**1.9**	**1.9**	**2.0**	**2.1**	**1.3**	**1.4**	**1.5**	**1.5**	**1.6**	**1.8**	**2.0**	**2.0**	**2.0**	**2.1**	**2.1**	**2.2**
1.1	**Ownership**	**2.0**	**2.0**	**2.0**	**2.0**	**2.1**	**2.2**	**1.2**	**1.3**	**1.3**	**1.3**	**1.5**	**1.7**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**
1 1 1	Natural monopoly	13	13	17	17	17	17	10	10	10	10	10	10	10	10	10	10	10	10
1 1 2	Potentially competitive businesses	27	27	23	23	27	30	13	13	13	13	17	20	27	27	27	27	27	27
1 1 3	Ancillary businesses	20	20	20	20	20	20	13	17	17	17	17	20	23	23	23	23	23	23
1.2	**Operation**	**1.8**	**1.9**	**1.7**	**1.7**	**1.7**	**1.8**	**1.2**	**1.4**	**1.6**	**1.7**	**1.7**	**1.8**	**1.6**	**1.8**	**1.8**	**1.9**	**1.9**	**2.0**
1 2 1	Natural monopoly	17	20	17	17	17	17	13	13	17	17	17	17	13	17	17	20	20	20
1 2 2	Natural monopoly planning and investment decisions	20	20	17	17	17	17	10	13	13	17	17	20	17	17	17	17	17	20
1 2 3	Private sector participation in service contracts	17	17	17	17	17	20	13	17	17	17	17	17	17	20	20	20	20	20
1.3	**Organizational structure**	**2.2**	**2.2**	**2.1**	**2.1**	**2.1**	**2.2**	**1.4**	**1.6**	**1.6**	**1.6**	**1.7**	**1.8**	**2.3**	**2.3**	**2.3**	**2.3**	**2.5**	**2.6**
1 3 1	Separation of natural monopoly and potentially competitive businesses	23	23	20	20	20	23	10	10	10	10	13	17	37	37	37	37	37	37
1 3 2	Separation of ancillary businesses	20	20	20	20	20	20	13	17	17	17	17	17	20	20	20	20	20	20
1 3 3	Decentralization	23	23	23	23	23	23	20	20	20	20	20	20	13	13	13	13	17	20
2.0	**Tariff reform**	**2.6**	**2.6**	**2.6**	**2.6**	**2.7**	**2.7**	**1.4**	**1.5**	**1.7**	**1.8**	**1.8**	**2.1**	**2.2**	**2.1**	**2.1**	**2.0**	**2.1**	**2.1**
2.1	**Structure of tariffs**	**2.3**	**2.4**	**2.4**	**2.4**	**2.6**	**2.6**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.8**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**2.1**
2 1 1	Political vs regulated operator's	20	20	20	20	20	20	10	10	10	10	10	17	17	17	17	17	17	17
2 1 2	Natural monopoly pricing	23	23	23	23	27	27	10	10	10	10	10	20	17	17	17	17	17	20
2 1 3	Potentially competitive businesses pricing	27	30	30	30	30	30	10	10	10	10	10	17	27	27	27	27	27	27
2.2	**Payments**	**3.0**	**3.1**	**3.1**	**3.1**	**3.2**	**3.2**	**1.7**	**1.9**	**2.3**	**2.6**	**2.6**	**2.6**	**2.5**	**2.3**	**2.3**	**2.2**	**2.3**	**2.3**
2 2 1	Intraindustry payments ratios	30	30	30	30	33	33	13	17	23	27	27	27	30	30	30	30	30	30
2 2 2	Final consumers collection ratios	30	33	33	33	33	33	20	23	27	30	30	30	27	27	27	23	23	23
2 2 3	State indebtedness	30	30	30	30	30	30	17	17	20	20	20	20	17	13	13	13	17	17
2.3	**State funding**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**1.7**	**1.7**	**1.9**	**1.9**	**1.9**	**1.9**	**2.0**	**2.0**	**2.0**	**1.9**	**1.9**	**1.9**
2 3 1	Subsidies level	27	27	27	27	27	27	13	13	17	17	17	17	20	20	20	17	17	17
2 3 2	Subsidies procedure	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
3.0	**Regulatory and institutional development**	**2.4**	**2.4**	**2.2**	**2.1**	**2.1**	**2.1**	**1.2**	**1.2**	**1.3**	**1.3**	**1.3**	**1.6**	**2.4**	**2.4**	**2.4**	**2.5**	**2.5**	**2.7**
3.1	**Effective regulatory institution**	**2.4**	**2.6**	**2.3**	**2.2**	**2.2**	**2.2**	**1.3**	**1.4**	**1.5**	**1.5**	**1.5**	**1.8**	**2.0**	**2.1**	**2.1**	**2.2**	**2.2**	**2.3**
3 1 1	Management selection of competitive businesses	27	27	23	23	23	23	13	13	13	13	13	17	23	23	23	23	23	27
3 1 2	Independence of regulator, insulation from political influence	23	27	23	23	23	23	10	10	13	13	13	17	20	20	20	20	20	20
3 1 3	Transparency of regulation	23	23	23	20	20	20	17	20	20	20	20	20	17	20	20	23	23	23
3.2	**Access regulation**	**2.3**	**2.3**	**2.0**	**2.0**	**2.0**	**2.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.3**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	**3.0**

3 Appendices

Appendix 1 (continuation)
Infrastructure Indicator evaluation

Indicator		Power						Gas						Water and Wastewater					
		00-N	01-M	01-N	02-M	02-N	03-M	00-N	01-M	01-N	02-M	02-N	03-M	00-N	01-M	01-N	02-M	02-N	03-M
	EBRD indicator	**3.0**		**3.5**		**3.5**								**1.5**		**1.0**		**1.0**	
	IERPC indicator	**2.4**	**2.5**	**2.5**	**2.5**	**2.5**	**2.6**	**1.9**	**2.0**	**2.1**	**2.1**	**2.1**	**2.0**	**1.4**	**1.4**	**1.4**	**1.5**	**1.5**	**1.6**
1.0	**Commercialization and privatization**	**2.4**	**2.5**	**2.5**	**2.5**	**2.5**	**2.7**	**1.6**	**1.7**	**1.8**	**1.8**	**1.7**	**1.7**	**1.3**	**1.3**	**1.3**	**1.5**	**1.5**	**1.5**
1.1	**Ownership**	**2.2**	**2.3**	**2.4**	**2.4**	**2.4**	**2.6**	**1.8**	**1.8**	**1.9**	**1.9**	**1.7**	**1.6**	**1.1**	**1.1**	**1.1**	**1.1**	**1.3**	**1.3**
1 1 1	Natural monopoly	30	33	33	33	33	33	13	13	13	13	13	13	10	10	10	10	13	13
1 1 2	Potentially competitive businesses	23	23	27	27	27	27	27	27	27	27	20	17	10	10	10	10	13	13
1 1 3	Ancillary businesses	13	13	13	13	13	17	13	13	17	17	17	17	13	13	13	13	13	13
1.2	**Operation**	**2.5**	**2.6**	**2.6**	**2.6**	**2.6**	**2.8**	**1.4**	**1.8**	**1.8**	**1.8**	**1.8**	**1.8**	**1.3**	**1.3**	**1.3**	**1.7**	**1.7**	**1.7**
1 2 1	Natural monopoly	30	33	33	33	33	33	20	20	20	20	20	20	17	17	17	20	20	20
1 2 2	Natural monopoly planning and investment decisions	27	27	27	27	27	27	10	20	20	20	20	20	10	10	10	13	13	13
1 2 3	Private sector participation in service contracts	17	17	17	17	17	23	13	13	13	13	13	13	13	13	13	17	17	17
1.3	**Organizational structure**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.6**	**1.6**	**1.6**	**1.7**	**1.7**	**1.7**
1 3 1	Separation of natural monopoly and potentially competitive businesses	37	37	37	37	37	37	20	20	20	20	20	20	10	10	10	13	13	13
1 3 2	Separation of ancillary businesses	13	13	13	13	13	17	13	13	13	13	13	13	10	10	10	10	10	10
1 3 3	Decentralization													27	27	27	27	27	27
2.0	**Tariff reform**	**2.2**	**2.5**	**2.6**	**2.6**	**2.6**	**2.7**	**2.0**	**2.2**	**2.3**	**2.3**	**2.3**	**2.3**	**1.7**	**1.8**	**1.8**	**1.8**	**1.8**	**2.0**
2.1	**Structure of tariffs**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	**2.9**	**2.2**	**2.2**	**2.2**	**2.2**	**2.1**	**2.1**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**
2 1 1	Political vs regulated operator's	30	30	30	30	30	30	20	20	20	20	20	20	10	10	10	10	10	10
2 1 2	Natural monopoly pricing	27	27	27	27	27	27	23	23	23	23	23	23	17	17	17	17	17	17
2 1 3	Potentially competitive businesses pricing	23	23	23	23	23	30	23	23	23	23	20	20	13	13	13	13	13	13
2.2	**Payments**	**1.9**	**2.8**	**2.9**	**2.9**	**3.0**	**3.0**	**1.9**	**2.7**	**3.0**	**2.8**	**3.0**	**3.0**	**1.9**	**2.3**	**2.3**	**2.3**	**2.3**	**2.7**
2 2 1	Intraindustry payments ratios	20	30	30	30	30	30	20	30	33	33	33	33	20	23	23	23	23	23
2 2 2	Final consumers collection ratios	20	30	33	33	37	37	20	27	33	27	33	27	20	23	23	23	23	30
2 2 3	State indebtedness	17	23	23	23	23	23	17	23	23	23	23	30	17	23	23	23	23	27
2.3	**State funding**	**2.2**	**2.2**	**2.2**	**2.2**	**2.2**	**2.2**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**
2 3 1	Subsidies level	23	23	23	23	23	23	20	20	20	20	20	20	17	17	17	17	17	17
2 3 2	Subsidies procedure	20	20	20	20	20	20	17	17	17	17	17	17	20	20	20	20	20	20
3.0	**Regulatory and institutional development**	**2.5**	**2.5**	**2.5**	**2.5**	**2.4**	**2.4**	**2.1**	**2.2**	**2.2**	**2.2**	**2.2**	**2.2**	**1.1**	**1.1**	**1.1**	**1.1**	**1.2**	**1.2**
3.1	**Effective regulatory institution**	**2.7**	**2.7**	**2.7**	**2.7**	**2.4**	**2.6**	**1.9**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**1.2**	**1.2**	**1.2**	**1.2**	**1.3**	**1.4**
3 1 1	Management selection of competitive businesses	20	20	20	20	20	20	20	20	20	20	20	20	13	13	13	13	17	17
3 1 2	Independence of regulator, insulation from political influence	30	30	30	30	30	30	23	23	23	23	23	23	13	13	13	13	13	13
3 1 3	Transparency of regulation	30	30	30	30	23	27	13	17	17	17	17	17	10	10	10	10	10	13
3.2	**Access regulation**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**

Appendix 2

General description of the infrastructure indicators

This appendix presents a brief description of the criteria for scoring each indicator.

1. Commercialisation and privatisation

1.1 Ownership

1.1.1 **Natural monopoly.** A natural monopoly is a network operator. A score of one means that the whole network is state owned; the score increases with an increasing share of corporatised, privatised and newly constructed private fixed networks in the total length of networks. The maximum score 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 the increase 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 establishing of an independent regulator. The maximum score is assigned if a private company manages the natural monopoly, and only an independent regulator, established by law, can intervene.

1.2.2 **Natural monopoly planning and investment decisions.** A score of one implies political interference in making 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 realised 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 no separation between the infrastructure and the service providers' managements, as well as separation 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. Decentralization 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 are approaching zero.

2.2.2 **Final consumer collection rates.** A score of one means low revenue collection from final consumers (households, companies, budgetary organizations) and constantly accumulating arrears. The score increases as progress with revenue collection is made and services are fully paid for. Apart from a non-linear pattern of evaluation grades with respect to payment percentage improvements in each sector, there is non-homogeneity of the patterns across sectors. The six sectors were divided into two groups in accordance with the potential efforts needed to reach higher payment levels. Telecommunications and roads represent the first group, where high levels of payments are relatively easy to achieve. The railroad, power, gas, and water supply sectors were put into the second group, where comparatively small improvements can be defined as considerable successes.

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

2.3 State funding

2.3.1 **Subsidies level.** A score of one means that some groups of consumers are heavily subsidised 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 the 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 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 pricing regulation method.** 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, finally determined by market mechanisms.

Appendix 3

Explanations for the infrastructure indicator evaluations shown in Appendix 1 (December 2002 - May 2003)

TELECOMMUNICATIONS

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 There were no changes in the ownership structure of Ukrtelecom. Besides, according to "Telas", the association of operators, Ukrtelecom installed 75,900 new telephone numbers during the first quarter of 2003, while private operators of local telephone communications connected up 15,500 new numbers. Thus, the share of private operators in the fixed line segment has not increased (taking into account the total already installed capacities). UMC received a license for local fixed-line communications services.

1.1.2 The further extension of services in the long-distance segment by private operators (e.g. Golden Telecom introduced an international telephone station in Lviv), and the eventual purchase of the UMC shares by the Russian company MTC from state-owned Ukrtelecom can be considered as a moderate improvement in the category "potentially competitive businesses". The indicator was increased to 3.0.

1.1.3 No significant changes in the ownerships structure of ancillary businesses were detected during the second part of 2002.

1.2 Operation

1.2.1 Due to unsuccessful attempts to pass the management of state corporate rights in Ukrtelecom to SPF, the SCCI retains both its regulatory and commercial functions. An independent regulator was not established for the sector.

1.2.2 Strong political influence on the natural monopoly's management persists in the sector. Thus, the funds initially devoted to the development of Ukrtelecom (30% of the deal) were reallocated to state revenues post-factum. Another example evidencing serious political influence is the criminal case against the top management of the company (started and closed after a transfer of money was made).

1.2.3 Investment activity of private companies in developing the networks continues to increase, particularly in potentially competitive segments. Still, the construction activity by state-owned operators outweighs private efforts in the fixed-line construction segment in absolute terms. The indicator was upgraded to 2.0

1.3 Organisational structure

1.3.1 While the situation with respect to the vertical structure Ukrtelecom-Utel has not changed over the last six month, the further divestment by UMC from Ukrtelecom can be considered an improvement. The increased shareholding in UMC to about 84% by the Russian company MTC has allowed the indicator to be increased to 2.3.

1.3.2 The organizational structure of the auxiliary businesses remained unchanged.

1.3.3 Although some consolidation tendencies in the mobile and ISP segment of telecommunications market were noted, they cannot be evaluated as centralisation. For this reason the indicator remains unchanged.

2.0 Tariff reform

2.1 Structure of tariffs

2.1.1 Adoption of the law abolishing charges for incoming calls, creation of a working group for revising the new rules on inter-operator payments - although positive - represent but a marginal improvement in this field.

2.1.2 The intent to change the existing system of payments for connecting to the networks of general use (Ukrtelecom networks) is a positive development, though it has not resulted in actual reforms. Besides, no tariff changes for final consumers were instituted.

2.1.3 The final adoption of the law abolishing charges for incoming calls testifies to some degree of pressure on the independent operators and thus, encourages deviation from the equilibrium price in the competitive market. However, if the regulation on interconnection between operators will be properly introduced, it would not deteriorate the situation.

2.2 Payments

2.2.1 No significant changes were detected in the category of intra-industry payments.

2.2.2 There was no substantial progress compared to the previous period particularly concerning the privileged categories of final consumers and governmental organisations in the fixed-line segment.

2.2.3 The state indebtedness is not eliminated yet. Due to dividend payments (about UAH 205 m to the state) the level of indebtedness may be partially decreased. At the same time, the social obligations of the state operators recently attracted more public attention. It is likely that the situation will improve in the forthcoming months.

2.3 State funding

2.3.1 The number of privileged categories of phone users as well as the subsidy level remained unchanged.

2.3.2 Municipal subsidies are paid to the fixed phone line operators with low degrees of transparency and high probabilities of discretionary decisions. No improvements in terms of replacement of price-subsidisation by income compensation were detected.

3.0 Regulatory and institutional development

3.1 Effective regulatory institutions

3.1.1 Shareholders select the managements of the competitive businesses, although for major state owned operators the government's involvement remains high. A slight improvement was noted, i.e. the further divestment of UMC from state ownership.

3.1.2 The political independence of the SCCI remains minimal. Adoption of the law "On telecommunications" by parliament in first reading may stimulate the establishment of an independent regulator in the future.

3.1.3 The transparency of regulations remains fairly low in the interconnection between operators and, particularly in the IP-telephony segment of the market. Attempts by AMC to resolve the problems have not led any noticeable improvements.

3.2 Access regulation. Despite many complaints from private operators, as well as from some governmental agencies, access regulation remains poor. Interconnection, licensing and inter-operators payments are the most urgent questions to be resolved in the nearest future.

RAILWAYS

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 The basic rail network is 100% state owned. Sales/transfers of local railways take place occasionally.

1.1.2 Passenger and freight transportation are 100% state owned. The corporatisation of freight transportation enterprises is complete. Forwarding enterprises are mostly private. Freight railway cars are partially in private ownership, partially transferred to Ukrtransleasing. The index was increased from 1.7 to 2.0.

1.1.3 The construction, maintenance and service enterprises are corporatised; privatisation is foreseen as a second stage. The index was increased from 1.7 to 2.0.

1.2 Operation

1.2.1 The railways are regulated by the State Railways Administration, which is integrated into the Ministry of Transport. The Minister of Transport is the Head of Ukrzaliznytsia.

1.2.2 The State Railways Administration strives for operational efficiency and profitability of the industry. The index was increased from 1.7 to 2.0.

1.2.3 Rail line construction and rolling stock maintenance is provided by state enterprises and joint stock ventures, which belong to the state.

1.3 Organisational structure

1.3.1 The railway infrastructure, passenger and freight transportation services are integrated in Ukrzaliznytsia, but keep separate accounts. Cross-subsidization is transparent, separate accounts for freight and passenger transportation are available. The score was increased from 1.3 to 1.7.

1.3.2 Ukrzaliznytsia has been charged with the management of more ancillary businesses. The index was not downgraded, as this process could be temporarily positive if these enterprises improve their financial performance and management practices prior to privatisation.

1.3.3 The railways are split into 6 regional companies. The South-Western Railway is allowed to issue bonds.

2.0 Tariff reform

2.1 Structure of tariffs

2.1.1 Tariffs for freight transportation were increased despite political pressures for reduction. The index was increased from 1.0 to 1.7.

2.1.2 Cross subsidisation of passenger transportation with freight transportation persists, but can now be tracked through financial statements. Ukrainian Railways shows profits. The index was increased from 1.0 to 2.0.

2.1.3 The tariffs do not precisely reflect the infrastructure and rolling stock operating costs; however overall, the costs are covered. The index was increased from 1.0 to 1.7.

2.2 Payments

2.2.1 Intra-industry payments are stable.

2.2.2 Monetary payments for freight transportation are about 97%.

2.2.3 State subsidies are provided at levels set by the central state budget and go mainly to financing of vocational training and other non-production related expenses.

2.3 State funding

2.3.1 The government still relies on (privileged) passenger transportation funding at the expense of Ukrzaliznytsia.

2.3.2 Subsidies are paid to the railways (service provider).

3.0 Regulatory and institutional development

3.1 Effective regulatory institutions

3.1.1 The President appoints the management, although the government body operating the railways is formally independent. Management decisions are increasingly insulated from political interference. The index was increased from 1.3 to 1.7.

3.1.2 The railways regulator is part of the government and is integrated with the rail line operator. Recent administrative reforms increased the independence of the railway administration in operational decision-making. Insulation from political influence increases. The index was increased from 1.3 to 1.7.

3.1.3 Tariffs are fixed by legislation. A transport tariff policy is being developed to increase the transparency and efficiency of tariff setting.

3.2 Access is regulated with government permission. Freight transportation using privately owned cars is possible through negotiations. The index was increased from 1.0 to 1.3.

ROADS

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 Roads are 100% in state and communal ownership.

1.1.2 Transportation enterprises are 90% corporatised. Freight transportation enterprises are about 30% private.

1.1.3 The social infrastructure, services, and automobile maintenance enterprises are mostly private. Publicly owned companies provide most of the road maintenance and construction. Contracting out of road construction and maintenance is not wide spread.

1.2 Operation

1.2.1 Regulation and management of the road network are separated from each other. The regulatory body (Ukrainian Road Service) is the principal managing body of the State Joint Stock Company "Motor Roads of Ukraine".

1.2.2 More emphasis was put on developing concession projects. A project to construct a state owned toll-road is under way. The index was increased from 1.7 to 2.0.

1.2.3 Road construction and maintenance is provided by state owned corporations and by some private firms, although contracts are still awarded in non-transparent ways. Most construction work is done by the local subsidiaries of the State JSC "Motor Roads of Ukraine".

1.3 Organisational structure

1.3.1 Roads management is separated from freight and passenger transportation services.

1.3.2 Road construction and maintenance are separated from transportation, some services are contracted out. Truck and bus maintenance is separated from transportation in most cases.

1.3.3 Roads are financed and operated at both the central and regional levels. Municipal authorities can make investment decisions on local road construction using the vehicle tax funds they collect. The index was increased from 1.7 to 2.0.

2.0 Tariff reform

2.1 Structure of tariffs

2.1.1 The government sets tariffs for passenger transportation, the government intends to rebalance the tariffs.

2.1.2 Officially road funding should derive from an excise tax on fuel and some other taxes, although the law was postponed. These taxes are only partially directed to road maintenance. The index was increased from 1.7 to 2.0.

2.1.3 The trucking and bus transportation markets are competitive, licensing procedures are improving.

2.2 Payments

2.2.1 Payment arrears between enterprises decrease.

2.2.2 Payments are monetary. Compensations for privileged passengers transportation remain an issue.

2.2.3 The state still finances the sector at inadequate levels. However, the budget allocation for roads construction and mainenance increased.

2.3 State funding

2.3.1 The number of privileged passengers remains high. Compensation levels are inadequate.

2.3.2 Subsidisation of privileged passengers is frequently put on the shoulders of service providers.

3.0 Regulatory and institutional development

3.1 Effective regulatory institutions

3.1.1 Only the roads operating management is appointed by the government. The index was increased from 2.3 to 2.7.

3.1.2 Road Service of Ukraine, the regulatory body in the sector, is organisationally separated from the government.

3.1.3 Tariff regulation principles are publicly discussed, but only when a state budget is being adopted.

3.2 Access is regulated by licensing. Tenders for servicing city bus routes were introduced. The index was increased from 2.7 to 3.0.

POWER

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 The controlling stakes in 13 (out of 27) regional distribution companies (oblenergos) were sold.

1.1.2 The nuclear, hydro and fossil fuel generating plants were separated into different companies. The nuclear and hydro generating plants remain 100% state property, while three fossil fuel generating companies were partially privatised, however the state remained the major owner. Three fossil fuel generating plants, owned and managed by a private company, used to belong to Donbassenergo Company.

1.1.3 Social infrastructure, construction and maintenance are still treated as part of the natural monopoly. The grade was increased from 1.3 to 1.7, since the private sector is starting to be attracted.

1.2 Operation

1.2.1 The regional distribution companies are corporatised, some of them are in private hands, all are regulated by the NERC. The grid is operated as a part of Ukrenergo.

1.2.2 Decision-making is still politically influenced. This is likely to diminish due to pressures from private investors (guaranteed profitability).

1.2.3 Construction and maintenance are managed by the oblenergos. Private sector participation gradually increases. The grade was increased from 1.7 to 2.3

1.3 Organisational structure

1.3.1 Generation, transmission and distribution are separated into independent companies.

1.3.2 There is a minimal degree of separation. The grade was increased from 1.3 to 1.7, since the private sector is starting to be attracted.

1.3.3 Decentralisation is not a high priority in this industry.

2.0 Tariff reform

2.1 Structure of tariffs

2.1.1 Political interference in tariff setting for certain types of consumers persists, through pressure is being exerted by the independent regulator and by decrees of the Cabinet of Ministers.

2.1.2 Cross subsidisation of households and preferential tariffs for coalmines are still in effect, and cost reflection is not unambiguous.

2.1.3 Real competition at the wholesale power market was observed for practically the first time since the reforms in the sector were launched. Power generating companies start competing by bidding. At the same time the absence of modern meters allowing instantaneous consumption measurements prevents the customers' consumption to be billed according to the load curve. The number of independent suppliers has increased substantially but the number of customers switched over to them is very small. Hence, the grade was increased from 2.3 to 3.0.

2.2 Payments

2.2.1 The situation improved significantly, but some settlements are still made in non-cash form.

2.2.2 The average level of cash payments by the oblenergos to the wholesale electricity market increased to 98.6% in April and to 100.4% in May. However, it was in the 84 to 88 % range between December 2002 and March 2003. Hence, the grade remained at 3.7.

2.2.3 The state budget foresees 100% payment for consumed power but the actual payments are below this level.

2.3 State funding

2.3.1 The poorest people are subsidised, the number of privileged categories remains substantial.

2.3.2 Subsidies are paid to the oblenergos.

3.0 Regulatory and institutional development

3.1 Effective regulatory institutions

3.1.1 The management is appointed by the state

3.1.2 The NERC is governed by decrees issued by the President and the Cabinet of Ministers, there is no law defining its rights and obligations.

3.1.3 A methodology of tariff setting based on a rate-of-return regulation was partially implemented due to strong political pressure. The NERC constantly changes the rules according to which it distributes moneys from the wholesale market clearing account, often disproportional to the market participants' costs in the final tariff. Transparency of the decisions being made has slightly increased; the grade was consequently increased from 2.3 to 2.7.

3.2 Access regulation Access is regulated by the NERC, but without a strong legislative base.

GAS

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 The trunk pipeline and the distribution net are 100% state property, however, NAK Naftogaz is corporatised.

1.1.2 The share of state ownership in gas extraction is very high, private companies are involved in gas imports. Private involvement in the wholesale segment of the industry decreased after Itera left the market. Consequently, the grade was decreased from 2.0 to 1.7.

1.1.3 The construction, maintenance and service efforts are carried out mainly by NAK Naftogaz but unrelated businesses were split off. Some contracts for trunk pipeline modernisation are being carried out by a private company.

1.2 Operation

1.2.1 NAK Naftogaz is subject to supervision by the government and the President; it can however operate as a market company.

1.2.2 The commercial objectives remain poorly defined, although commercialisation has increased and debt accumulation for consumed Russian gas was stopped, as was illegal siphoning.

1.2.3 Employing private companies to repair and maintain the pipelines has started. The private sector is involved in gas deliveries to enterprises.

1.3 Organisational structure

1.3.1 NAK Naftogaz was split into extraction, transportation and sales.

1.3.2 There is a minimal degree of separation.

1.3.3 Decentralisation is not foreseen for this industry.

2.0 Tariff reform

2.2 Structure of tariffs

2.1.1 There still is government interference in tariff setting for some types of consumers.

2.1.2 Industrial enterprises have choices; NERC determines the price of transportation. Households and utilities are invoiced at below-cost prices. As a result under-investment in the network persists.

2.1.3 NERC sets ceiling prices on natural gas for final consumers according to a Cabinet of Ministers' decree. Naftogaz influenced prices of private supplies by administrative measures.

2.2 Payments

2.2.1 Arrears accumulation, non-payment or payments in non-cash form and the problems associated with them still persist.

2.2.2 The payment collection rate (including cash payments) substantially decreased due to huge non-payments by power generating and heating companies. Therefore, the indicator was downgraded from 3.3 to 2.7.

2.2.3 The state remains among the major debtors; however, its payments for privileges and subsidies to households exceeded 100% during the first five month of 2003. The grade was increased from 2.3 to only 3.0 since a major percentage was paid by mutual settlements, rather than by direct money transfers to Naftogaz.

2.3 State funding

2.3.1 The poorest households are subsidised; delayed debt repayment by enterprises continues.

2.3.2 Subsidies are paid to the public sector.

3.0 Regulatory and institutional development

3.1 Effective regulatory institutions

3.1.1 The government appoints the management, although NAK Naftogaz is formally independent.

3.1.2 NAK Naftogaz is subject to government control.

3.1.3 Gas auctions were abolished, distribution costs and the price of natural gas obtained as a fee for Russian gas transit are non-transparent.

3.2 Access regulation Access is regulated by the NERC, but without a strong legislative base

<u>WATER AND WASTEWATER</u>

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 The natural monopolies (water distribution and drainage systems) are mostly in communal ownership. Kyivvodokanal is corporatised. JSC "Donvuglevodokanal" is a privatised company.

1.1.2 Most potentially competitive businesses (water supply and wastewater treatment) are still integrated with the natural monopolies and are in communal ownership.

1.1.3 Construction and maintenance are integrated with the natural monopolies and are also mostly in communal ownership.

1.2 Operation

1.2.1 Water and wastewater services are provided by local monopolists, which are separate companies, but administered by local governments, which are also the owners of the companies in most cases.

1.2.2 The political influence on decision-making is very strong, local governments pursue goals of social support.

1.2.3 Private sector participation in service contracts is low; where it exists it is mostly due to the participation of international financial institutions.

1.3 Organisational structure

1.3.1 No separation.

1.3.2 No separation.

1.3.3 Companies operate only under the supervision of the local authorities. Interventions by the local administrations are quite common.

2.0 Tariff reform

2.1 Structure of tariffs

2.1.1 The tariff levels are determined by municipal officials, primarily in accordance with political considerations.

2.1.2 Tariffs for residential consumers are at below-cost levels. The tariffs for industrial consumers are several times higher than residential ones. Natural monopolies charge all costs to consumers and have no incentives for minimising costs. Improved methodologies of costs accounting are being introduced slowly.

2.1.3 Potentially competitive businesses are integrated parts of the natural monopolies, pricing of the services is not separated.

2.2 Payments

2.2.1 Payment arrears are significant. Major creditors of the industry are the power distribution companies.

2.2.2 Collection rates from households grew to an average of 83%. Total household debt for services is UAH 1.2 bn (on 1 of May 2003). The household indebtedness accumulation slowed down slightly and is currently at an average rate of UAH 11.8 m per month. Several oblasts show above the 100% payments, indicating reductions in household indebtedness. The index was increased from 2.3 to 3.0.

2.2.3 The debt by local governments to companies becomes shorter-term. The index was increased from 2.3 to 2.7.

2.3 State funding

2.3.1 The poorest households are subsidised. The amount of subsidisation varies substantially between regions.

2.3.2 Subsidies are paid to the water supply and sewage companies.

3.0 Regulatory and institutional development

3.1 Effective regulatory institutions

3.1.1 Regional governments appoint the management of the water supply monopolies.

3.1.2 There is no independent regulator. The newly created State Committee for Public Utilities is slated to be the regulator for the industry, although there is no clear definition of the committee's regulatory responsibilities and procedures. The indicator was increased from 1.3 to 1.7.

3.1.3 Although clear tariff regulation guidelines are available they are not obligatory for local administrations: tariffs are set arbitrarily. The Law of Ukraine "On Drinkable Water" was passed. The index was increased from 1.0 to 1.3.

3.2 Access regulation There are no rules for access.