

Infrastructure Monitoring for Ukraine (IMU)

No. 4/2002

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Table of contents

| | |
|--|-----------|
| Foreword | 3 |
| 1. Summary | 4 |
| 2. Ukrainian Infrastructure Policies June-November 2002 | 7 |
| 2.1 Telecommunications | 10 |
| 2.2 Railways | 12 |
| 2.3 Roads | 15 |
| 2.4 Power | 18 |
| 2.5 Gas | 20 |
| 2.6 Water and wastewater | 24 |
| 3 Appendices | 28 |



Foreword

This report “Infrastructure Monitoring for Ukraine” is the fourth in a biannual series. It presents information on the restructuring of six infrastructure sectors of the Ukrainian economy in a standardized manner, which allows for cross-industry comparison.¹ When developing the evaluation methodology the Institute for Economic Research and Policy Consulting followed the EBRD’s approach. 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.

Each issue of IMU has a similar structure. A short executive summary outlines major developments within selected sectors of the infrastructure. A general analysis of the Ukrainian infrastructure policies is presented in the second section. The detailed study of reforms in each of the six sectors includes not only an ex post analysis, but also an outline of 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. Appendixes summarize the evaluations in a 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.² 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.

¹ For earlier issues, see Infrastructure Monitoring for Ukraine (IMU No. 1, June 2001, IMU No. 2, December 2001, IMU No. 3, June 2002); they can be downloaded from the Institute’s Website at [http://www.ier.kiev.ua/English/IMU_eng.html].

² IMU No. 1, June 2001, see also IERPC Working Paper No. 8 [http://www.ier.kiev.ua/English/WP/2001/WP2001_eng.html].



1. Summary

Despite growing attention to the importance of infrastructure to the Ukrainian transition economy, no significant break-through in these industries has yet been observed in Ukraine. The implemented reforms were of a sporadic nature and hit important but often not crucial problems. While the overall reform progress can be evaluated as slightly positive, the interlinks between reformed and still unreformed areas reduce the overall benefit. Thus, during the past six month minor progress in the telecommunications, railway, water and wastewater, and roads sectors was accompanied by a slight deterioration in the power and gas sectors. In general, the most urgent items of reform outlined in the previous issues of IMU remain the same.

The indicator for the **Telecommunications** sector increased from 2.24 to 2.26. Tariff rebalancing for the fixed-line segment increased the profitability of investment projects in local networks, which should accelerate the growth of the private share in this sector. The purchase of a major parcel of UMC stock by the Russian telecommunications company MTC, turned one of the two major mobile call operators over to private management and created improved investment opportunities due to better access to external funds. Finally, the tightening of controls of incoming traffic and the licensing of independent operators should improve inter-industry payments as well as eliminate multiple cases of fraud where international traffic was paid at local calls tariffs. Meanwhile, urgent issues of interconnection regulation, particularly in the light of the cancellation of charges for incoming calls, as well as the establishment of an independent regulatory agency are still on the reform agenda.

For the **Railway** sector the indicator has increased from 1.54 to 1.56. Corporatisation of potentially competitive and ancillary businesses proceeded successfully, while Ukrzaliznytsia put the emphasis on increasing the manageability and financial performance of the industry. Passenger transportation continues to produce losses, however attempts at cutting them through decreasing the intensity of suburban transportation have taken place. Investment proposals to attract external financing continue to be developed, however, large-scale projects, such as the recent Kyiv-Kharkiv express line, are still financed out of Ukrzaliznytsia's own resources.

The **Road** sector's indicator increased from 2.19 to 2.21. The separation of roads regulation from roads management was completed. Central government funds allocated to road construction and maintenance are now transferred to the regulator, who employs local subsidiary companies of SJSC "Motor Roads of Ukraine" to provide these services. The problem of insufficient budgetary financing has still not been overcome as no measures were taken to establish a new road fund. The government was successful in signing concession contracts for the construction of the Lviv-Brody and the Krakovets- Lviv roads, as well as in entering into contracts with private firms for road construction and maintenance. The Ukrainian legislation in the sphere of managing and regulating concession work needs amendments to stimulate further progress.

The reforms in the **Power** industry were minor between June-November 2002, while the regulator's market intervention even resulted in a slight deterioration



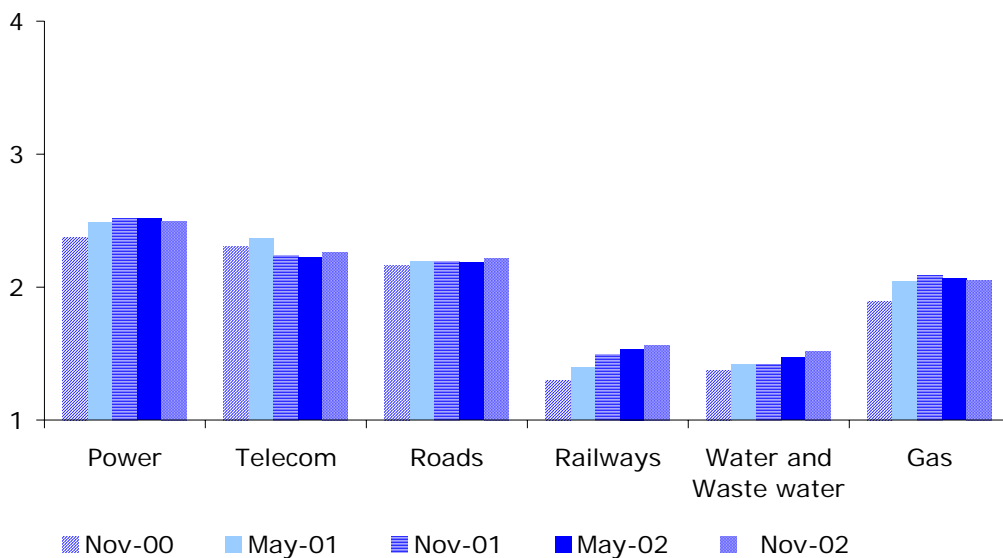
of the indicator from 2.51 to 2.49. The parliamentary elections in April 2002 also had no substantial impact yet on restructuring this industry. Privatisation of the regional power distribution companies (oblenergos) and of the power generating companies according to the privatisation plan for 2002 was postponed for an indefinite period. The NERC tried to solve the problems of the financial sustainability of the fossil fuel power generating plants at the expense of the nuclear power company "Energoatom" and the oblenergos. Payments to these companies from a special clearing account were in substantial disproportion to the total cost of the electricity tariff borne by them. Among positive trends, the substantial increase in the level of monetary settlements should be emphasised.

The **Gas** industry indicator declined from 2.06 to 2.05 due to declining competition in this potentially competitive market segment. Since July 2002 Naftogaz started supplying final customers with a monthly consumption of 100 thousand cubic meters (tcm) and more by direct contracts only. It also required the same from regional distribution companies and from Itera, which sells natural gas obtained for transit. Naftogaz paid only 70.5% of the amount of taxes due. 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 the sector. Same as in the power sector tougher budget constraints imposed by Naftogaz resulted in a substantial increase in the cash payment ratio and increased the industry's indicator. Naftogaz and Gazprom signed an agreement setting up the International Consortium on Management and Development of Ukraine's Gas Transit System.

The indicator for the **Water and Wastewater** industry increased from 1.47 to 1.51. This improvement is related to the reorganization of the Committee for Public Utilities, which became the industry's regulator. The Committee identified as its major priorities, a clear definition of property rights and financial stabilization of the water supply companies. The indicator was also increased due to increased private ownership of water supply companies (Donvuglevodokanal, Donetsk). Low collection rates from households, increasing indebtedness for consumed electricity, cross-subsidisation of the residential sector by industry, and the absence of contractual relationships between service providers and consumers remain major problems for this sector.



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 small changes to be seen.



2. Ukrainian Infrastructure Policies June-November 2002

The common denominator in the infrastructure sector is absence of measurable achievements in its restructuring. In the Graph 1 we even noticed a slight regression in the power and gas industries. Implemented administrative measures have brought substantial positive results by reducing non-payments and, in particular, non-cash payments in these industries and resulted in payment indicator upgrades. However, the NERC's violation of market criteria by redistributing moneys in the power industry from a wholesale market clearing account, and Naftogaz' usage of its monopoly power to eliminate competitors from the potentially competitive supply segment of the market resulted in a slight overall deterioration of the indices for these industries. In the other four infrastructure industries covered by the IER infrastructure monitoring system, only small progress with reforms was observed. In telecommunications the indicator's upgrade came from privatisation of the largest mobile line operator, tariff rebalancing in the fixed line segment, and elimination of cases of interconnection fraud. In the water and wastewater industry the improvement came from a reorganisation of the state regulator and from increased private ownership in the industry. In the railway industry the total indicator increase resulted from the corporatisation of potentially competitive and ancillary businesses and from improving the financial performance of the industry. In the roads sector the indicator upgrade can be attributed to separation of the roads regulation function from roads management and from an improved central government funds allocation for road construction and maintenance.

The EBRD indicators for all Ukrainian infrastructure industries remained stable (see Graph 2) while the unweighted average sum of the IER indicators for five industries increased by only 2%. Thus, both the EBRD and IER figures indicate that the reforms in infrastructure industries have lost dynamism during the last year. A significant difference in the indicator values is observable only in the power and water/wastewater industries. In the power industry the difference is mainly attributable to methodological distinctions. As noted in previous issues of the IMU, the EBRD indicators are to a large extent based on the adoption of legislation, while the IER indicators take actual performance characteristics into account³. Thus, the NERC's violation of its independent regulator role, the arbitrary money distribution from the wholesale clearing account, the cross-subsidisation of households by industry and the absence of competition at the wholesale market were only reflected in the much lower IER grades. In the water and waste-water industry the EBRD indicator is likely to be underestimated, since industry characteristics mostly correspond to score 2 and some

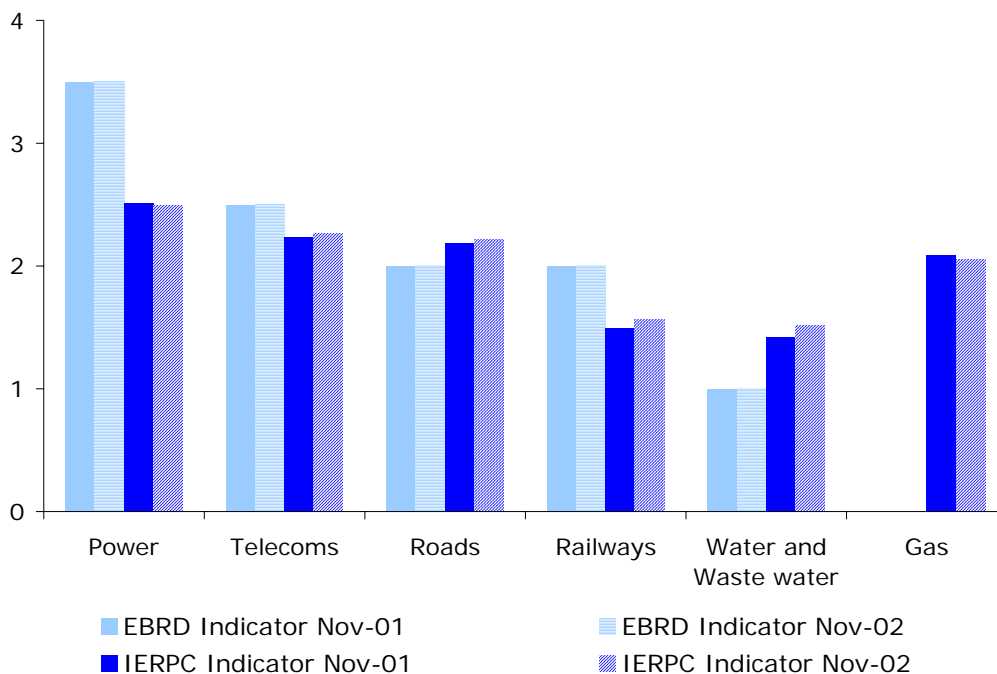
³ see IMU No. 1, June 2001, IMU No. 2, December 2001, available online at [http://www.ier.kiev.ua/English/IMU_eng.html].



characteristics of score 3 according to the EBRD classification system can be observed.⁴

Graph 2

Infrastructure indicators for Ukraine



Sources: EBRD, Transition report, 2001 and 2002; own estimations

In its strategy for Ukraine adopted in September 2002, the EBRD has identified infrastructure as one of the sectors most in need of modernization⁵. Promoting commercialisation and privatisation of major utilities as well as encouraging energy efficiency were identified as the highest priorities by the EBRD. It plans to cooperate with industries where the authorities are ready to continue institutional and structural reforms, and to jointly identify needed investment projects. Ukrainian infrastructure projects have a low priority for the World Bank; nevertheless, it is now ready to disburse financing for a water supply project in Lviv starting in 2003.

Since this infrastructure review does not cover all infrastructure sectors we would like to briefly mention some major developments in other sectors.

⁴ The level of decentralisation is rather high and the companies are municipally owned (grade 2). A semi-autonomous regulatory agency was established to advise on tariffs and service quality, but without power to set them (grade 3). General public guidelines exist regarding tariff-setting and service quality (grade 2). Donvuglevodokanal is an example of a private company, which provides water and wastewater services in Donetsk city (grade 2). (EBRD classification system for transition economies. EBRD Transition Report 2002. p.34)

⁵ EBRD, *Strategy for Ukraine*, approved by the Board of Directors on 3 September 2002, available online at: <http://www.ebrd.com/about/strategy/country/ukraine/ukraine.pdf>.



The new management of the Ministry of Transport has initiated an experiment in air transportation. Between July 1st and September 30th transportation tariffs were slashed by 50 percent and about 40 new routes were introduced. 23 public and privately owned airline companies were forced to participate. Although the passenger volume increased 2.1 fold, this did not compensate for the decrease in revenues. The average airplane capacity utilisation was estimated to be 60%. Total losses by the participants in the experiment ranged from UAH 7.6 m to UAH 10.5 m according to different estimations, while revenues were about UAH 26 m. By lowering the airport and servicing tariffs the Ministry compensated the airline companies for about UAH 2.2 m of these losses⁶. Most airports could not avoid making losses due to pressure put on them by the Ministry of Transport by ordering them to provide the airlines with discounts for airport services. Nevertheless, based on the increased transportation volume, the experiment was judged to have been successful and was continued till the spring of 2003⁷.

The Ukrainian government remained committed to the process of restructuring airports, started in 2001. More than 13 out of about 28 functioning airports were transferred from state to communal ownership between 1999 and 2002. Unbundling airports from airlines, planned by the Ukrainian government, was not completely successful, as in the case of Lviv Airlines, where separation of the airport and the airline was suspended. Several airports do not stand a chance to become profitable, as they are located too close to each other. Thus, closing down some airports will be inevitable. Suspending operations at Chernihiv airport has already started. Corporatisation efforts prior to privatisation continued; however, only two airports are to be corporatised, the international airports "Boryspil" and "Symferopil". "Boryspil" airport has successfully raised UAH 20 m for construction activities on the Ukrainian stock market.

The largest public utility service, heating, is among the slowest reformers, proving to be practically impervious to market reforms. Tariffs are regulated by regional state administrations, are higher for industrial consumers than for residential ones, non-payments are still rather significant, and the quality of service is still very low. Thus, the industry's payments for consumed natural gas is the lowest among all customers groups and Naftogaz has substantially reduced gas supplies to heating enterprises. As a consequence, the absence of heating services and an extremely low quality of service remain typical features of heating supply in most of the regions in the fall of 2002. The number of meters installed is extremely low and the practice of charging for services that were not provided (e.g. for lack of heating for several days per month or for heating temperatures substantially below standard) is widespread.

⁶ Decision of the Ministry of Transport "On results of the experiment to substantially increase internal airline transportation", No. 212, November 20, 2002.

⁷ Order of the Ministry of Transport "On the program of air transportation development of internal routes in Ukraine in Winter IATA 2002-2003", No. 749, October 24, 2002.



2.1 Telecommunications

2.1.1 Reforms, June - November 2002

The reforms in the telecommunications sector during the second part of 2002 were mainly related to tariff changes for telecommunication services. Thus, according to a decree of the State Committee on Communications and Informatisation (SCCI)⁸, rates for telephone calls were rebalanced. In particular, local call charges were increased by more than 50% on average and international call charges were decreased by 20%. According to SCCI officials, this should lead to a profitability increase for Ukrtelecom by 9-10%, which in turn would positively affect its investment attractiveness. The expected increase in the expansion of the local telephone network, primary due to increased profitability via private investment projects, may be considered as the main positive result of the tariff-changes. This represents an important development taking into account that in Ukraine there are more than 10 million local phone subscribers, while some 2.4 million are still waiting to be connected. At the same time, the attempts to support tariff increases for local calls by the necessity to increase the investment attractiveness of OJSC "Ukrtelecom", testify to the persistence of political influence on the regulatory authority within the sector. It is also worth noting that tariffs for rural telephone consumers, which are not cost covering ones, were not affected.

Another major event in telecommunications was the adoption by the parliament of Ukraine of a law abolishing charges for incoming calls. This effort met with fierce critique from the major mobile operators in Ukraine, who argued that it would result in a sharp drop in their revenues and a corresponding decrease in tax receipts by the state. The rationale behind the critique of the "European approach" to incoming calls is based on poor settlements between fixed-line and mobile operators, which may lead to a significant redistribution of incomes from the latter⁹ to the former. This, in turn, may lead to the reallocation of per-minute payments to subscriber rental fees, which may reduce the number of less wealthy consumers. Thus, the introduction of the new law requires significant improvements in regulating the interconnections between operators, as well as strict controls for mutual payments within the sector.

According to the joint agreement between nine international telephone connection operators¹⁰, connections to their networks will be provided only to operators with relevant licenses, independent of the type of technology used. Such an agreement is likely to greatly affect IP-telephony operators¹¹ charging substantially lower tariffs for their services, which are inferior with

⁸ No. 120 as of June 07, 2002

⁹ According to a "Golden Telecom" representative, about 35% of the company's revenues are generated by payments for incoming calls.

¹⁰ They are Ukrtelekom, Utel, Kyivstar, Golden Telecom, Telesystems of Ukraine, DCC, Ukrainian Communications, Ukomlain and International Telecommunications. These companies have signed joint action agreements in the international telecommunications market.

¹¹ The number of IP-telephony operators in Ukraine is estimated at between 60 and 200 companies.



respect to quality compared to other technologies. As a result, tariffs for IP-telephony were substantially raised to meet the marginal tariffs for international telephone calls¹². At the moment, only those IP-telephony operators, who have agreements with international connection operators, continue to provide services, all others were disconnected last September.

Disconnections of independent operators from the telecommunications networks of Ukrtelecom were supported by the Antimonopoly Committee of Ukraine as being legal when it was discovered that they provided international traffic under the guise of local conversation. At the same time, the very use of such disconnection actions may be considered as a sign of use (if not abuse) of Ukrtelecom's monopolistic position. Several operators, who were disconnected from the networks, argued that the disconnections were not done in accordance with sound business practice¹³.

The ownership structure in the telecommunications sector was significantly affected by a series of acquisitions. In particular, the Russian telecommunications company MTC, which is 40% owned by Deutsche Telecom acquired 57.67% of UMC's shares for USD 194.2 m, and has an option agreement for the purchase of the remaining 42.33% for \$142.6 m in 2003-2005. In June the OJSC "Ukrtelecom" bought the last privately owned 10% of Utel shares from Brokbiznesbank, becoming the sole owner of the company. De-facto, the vertical integration between the major local telecommunications operator and the major international and intercity operator was thus completed. The Ukrainian owners of Golden Telecom (Ukraine), Agat Telecom (20.31%) and Brig Telecom (10.69%) announced their liquidations in October this year. Their shares were bought by the Russian holding company, Golden Telecom, which became sole owner of these former Ukrainian telecommunications companies. Besides, the Russian company "Alfa Group", which owns 48% of Russian Golden Telecom and 50.1% of the company "Storm", is likely to enhance its control over another Ukrainian operator, "Kyivstar GSM", if the Antimonopoly Committee of Ukraine approves the purchase of an additional share of "Kyivstar GSM" by "Storm", which would lead to a total ownership by "Storm" of 54%. The successful completion of this transaction would mean a de-facto merger between these two Ukrainian operators in the telecommunications sector¹⁴. At the same time, privatisation of the major fixed-line telecommunications company OJSC "Ukrtelecom" was postponed again for an indefinite period.

While no substantial changes appear to have been made with respect to the privileged consumers in the telecommunications sector, parliament requested a financial fraud investigation at Ukrtelecom in September. The investigation should reveal the legality of transfers of large amounts of money to other companies this year, as well as Ukrtelecom's failure to pay UAH 147 m. in dividends to the state in 2000.

¹² On average, the tariffs for IP-telephony services are now about 20% lower than the marginal tariffs established by the law.

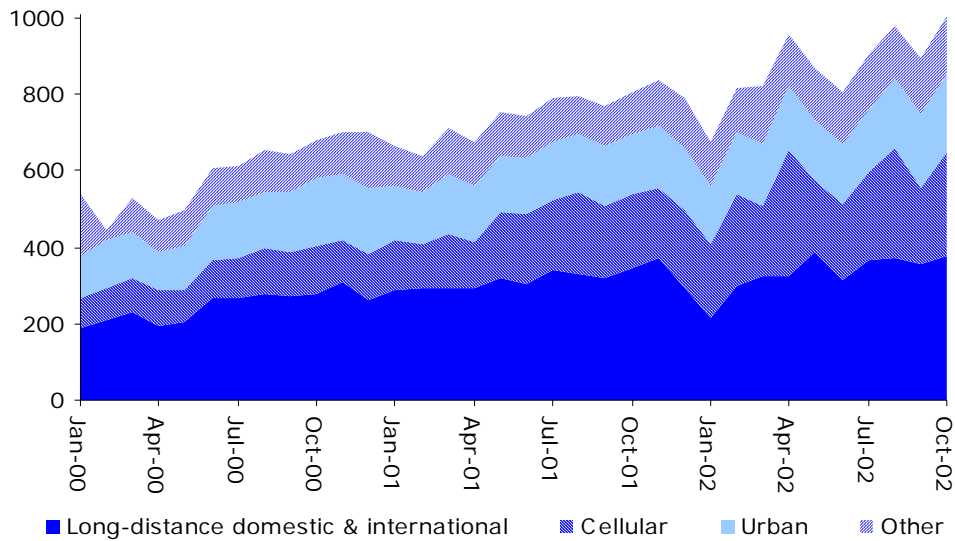
¹³ Among them are Arkada-X, Trevelynk Telecom, Golden Telecom, etc.

¹⁴ According to information disclosed by a representative of the 6th department of AMC.



Graph 3

Incomes in the telecommunications sector, UAH million



Sources: Business Week, own calculations

2.1.2 Prospects

Despite significant developments in the sector with respect to tariff setting, solutions to the most urgent problems are still in limbo. Particularly, the targets of establishing of an independent regulatory authority and of adopting a law on telecommunications are still on the agenda. Should the President sign the law abolishing charges for incoming calls, then the issue of regulating interconnections, particularly in the mutual payments area, will become a most important one.

Taking into account the significant problems with privatising Ukrtelecom, it might be rational to consider other opportunities for involving private parties in the management of the company. Different types of private-public partnerships, such as concessions, management contracts, etc, could provide such opportunities.

2.2 Railways

2.2.1 Reforms, June - November 2002

After the introduction of structural changes in the railway industry in previous periods, Ukrzaliznytsia (Ukrainian Railways) concentrated its efforts during the last half year on improving the industry's management and its financial performance. This included increasing management's responsibility for performance and financial results of the enterprises.

The Ministry of Transport introduced financial monitoring systems for Ukrzaliznytsia and other transportation departments in order to avoid artificial bankruptcies and devaluation of the enterprises. This also serves to prevent senior enterprise management from concealing bankruptcies of



their enterprises. Heads of enterprises, whose work was deemed inadequate in cutting indebtedness and loss making, were officially reprimanded.

Having transferred already much of the social infrastructure of the railway enterprises of to communal property, a survey of such entities still part of the railway industry was made. To date Ukrzaliznytsia is left with 1780 objects and enterprises, Ukrzalizremmash with 25, and Ukrpromzaliztrans with 37. This survey is certainly beneficial, provided it leads to further transfers, liquidations or privatisations of enterprises as appropriate.

The start made with separating and privatising non-main railway infrastructure can be regarded as a positive development, however the regulation of the process should be improved. An example is the recent privatisation of a railway connection between Illichivsk-Paromna and the port of Illichivsk undertaken by Odes'ka railway. Here, an audit of the existing non-main lines that can be sold without harm to the integrity of the railway infrastructure should have been made, and a mechanism to sell these non-main lines should have been developed. Besides, provided the sales of branch lines is agreed to by the State Property Fund, they can serve as additional sources of revenues for the state and for Ukrzaliznytsia. Private ownership of non-main lines is to be striven for in the program of privatisation.

Ukrzaliznytsia expanded into managing construction enterprises producing railway ties¹⁵. This activity, although aimed at minimizing prices of inputs, diverts attention from the more pressing responsibilities of Ukrzaliznytsia and represents a trend running contrary to separating the management of the infrastructure from that of ancillary and potentially competitive businesses.

Cost cutting in the unprofitable suburban passenger transportation field continued¹⁶. For instance, Pivdenna Railway cancelled several suburban trains on 8 routes in the Kharkiv region due to weak capacity utilization and unprofitability of the routes. This cost cutting trend is positive, however, still quite insufficient. In the Pivdenna Railway case the suburban transportation losses amount to UAH 41.3 m, but the train cancellations decreased these losses by only UAH 1.3 m¹⁷. According to law, the losses from suburban transportation and from the transportation of privileged passengers are to be covered by local governments¹⁸, failing that the railway authorities should decrease the number of trains or cancel routes,

¹⁵ Order of the Ministry of Transport 'On transferring the management rights over some construction enterprises to Ukrzaliznytsia', N 459, 07.09.2002

¹⁶ It should be noted that some obvious fund misallocations still arise. For instance, TV commercials are being produced advertising the Ukrainian railways as well as individual regional railways. There is not much sense making such advertisements, since the railways are monopolies and transportation alternatives are very limited. This reveals that the costs of railway transportation are generally not controlled. Appropriate regulations should be introduced in the industry.

¹⁷ Ukrainian News agency

¹⁸ Law of Ukraine "On local self-government", 280/97-VR, 05.21.97



with local government approval. Loss coverage out of state funds remains inadequate. As long as Ukrzaliznytsia is officially mandated to achieve not only economic but also of social goals, massive cost cutting remains improbable.

After checking approximately 30% of Ukrzaliznytsia assets, the Central Control and Auditing Department concluded that they were undervalued by UAH 6 bn. Approval by Ukrzaliznytsia of the results of this verification would lead to higher amortization costs and would thus undermine its nominal financial performance by lowering its accounting profits. However, the enterprise should be able to use the rising amortization costs for further renovation of the heavily depreciated rolling stock.

In an attempt to solve the issue of financing investment, Ukrzaliznytsia continued to develop investment proposals for commercial banks regarding the production of new rail cars and electric train units. Developing the transportation capacity with the help of public contracts is a positive trend, especially if private sector expertise is attracted. Private sector involvement would signal that investment projects approach economic justifications based on market principles. However, so far Ukrzaliznytsia was unable to finance large-scale investment projects with external funds, relying mainly on internal financing.

The major recent investment project of Ukrainian Railways, costing about UAH 300 m, was completed, connecting Kharkiv and Kyiv with an express train covering the distance in 6.5 instead of 9 hours. Continuous financing to maintain the high quality of this rail link is planned. This project demonstrates Ukrzaliznytsia's capacity to implement projects despite a lack of private participation.

Ukrzaliznytsia continues the financing of airplane construction by means of Ukrtransleasing Corporation. The planes are leased to Kharkiv-Aviamost, which re-leases them further. The benefits of such investments outside Ukrzaliznytsia's basic expertise are not obvious, and the cost is to slow down service improvements in the railway sector. Therefore, this activity should be regarded as questionable and should be studied by regulators of the industry. Since so far there are no independent regulators for this industry, this should be done by the Ministry of Economy and the Antimonopoly Committee.

2.2.2 Prospects

While the cross-subsidization of services provided by Ukrzaliznytsia continues to persist, the first experience of cost cutting in the loss making area of suburban transportation could be developed further. The legislation mandates that losses from suburban transportation are to be covered by the local governments and losses from carrying privileged passengers are to be covered by the national or local governments depending on who had granted the privilege. Regional railways could be stimulated by improving Ukrzaliznytsia's relationship with local governments, and by reviewing the route maintenance needs and the density of suburban transportation. Wherever possible routes should be cancelled or the train frequency reduced. The losses from suburban transportation and the transportation of privileged customers should be provided for in the budgets.



The privatisation of non-main lines could be stimulated as an additional source of funding and cost cutting for Ukrzaliznytsia, provided of course that the private parties will be responsible for railway maintenance. To avoid a chaotic sale of non-main lines, Ukrzaliznytsia should play a coordinating role by providing the regional railways with the procedures agreed to with the State Property Fund.

Longer-term initiatives should include further separation of railway operations from their regulation. In this regard, while regional railways could assume more responsibility for operational activities, Ukrzaliznytsia could concentrate more on strategic management, regulation of activities and monitoring of operations. Introduction of cost accounting for different railways transportation services would facilitate further reforms in this sector.

2.3 Roads

2.3.1 Reforms, June - November 2002

Separating the regulatory body and the road maintenance company was completed. It was done according to the Presidential Decree separating the regulating body and the road maintenance state stock company¹⁹. Currently, the State Service of Motor Roads of Ukraine (regulating body) develops policies and performs regulatory functions. Through its regional departments the State Service also procures construction of national roads. Most orders are currently placed to regional subsidiaries of the State Joint Stock Company "Motor Roads of Ukraine".

Local road construction and maintenances continues to be financed from local government revenues, i.e. vehicle taxes. National road construction and maintenance is financed from general revenues of the central government. The current level of road financing remains far below the estimated needs of the sector. Attempts by the Cabinet of Ministers to introduce excise taxation related to fuel usage were blocked by the Ministry of Finance²⁰. Strict implementation of the Law "On sources of financing the roads sector"²¹ is estimated to improve the financing of road construction and maintenance by UAH 1 bn. Nevertheless, introduction of the law would link road financing to taxation not directly related to road usage, for instance, custom duties. Therefore, if the law were to be implemented, it would be advisable to limit the revenue only to the fuel excise tax. The actual financing of roads in 2002 is expected to exceed the level of 2000, mostly due to increases in the national roads sector (Table 1). The decrease in local road financing may be related to changes introduced in the vehicle tax payment procedure.

¹⁹ Decree of the President "On measures to improve the efficiency of the roads management in Ukraine" N 1056/2001, November 8, 2001.

²⁰ Decree of the Cabinet of Ministers "On financing the roads sector", N 465-p, 17.08.2002.

²¹ Law of Ukraine "On sources of financing the roads sector", N 1562-XII, 18.09.1991.

**Table 1.**

Planned and actual expenditures for road construction and maintenance in Ukraine, 2000-2003, UAH m

| | | 2000 | 2001 | 2002 |
|---------|----------------|--------------------|--------------------|-----------------------------|
| Central | Planned | 489.8 | 489.8 | 912.0 |
| | Actual | 578.2 | 377.8 | NA |
| Local | Planned | 344.4 ⁼ | 304.1 ⁼ | 721.4 ⁼ |
| | Actual | 370.0 | 580.0 | 612.4 |
| Total | Planned | 918.3 | 789.4 | NA |
| | Actual | 770.6 ⁼ | 723.1 ⁼ | 523.6 ⁼ |
| Total | Planned | 859.8 | 1,069.8 | 1,524.0²² |
| | Actual | 1,496.5 | 1,167.2 | 1,251.0⁼ |

⁼ - Funds allocation for 10 months of the year

Source: Treasury reports

The State Service of Motor Roads of Ukraine continues to search for private participation in road construction by continuing to offer concessions. JSC "Roztochchia ST" has won the concession tender for the construction of the Lviv-Brody road. The road is a continuation of the Krakovets-Lviv toll road project, which is currently under construction²³. Both roads are sections of the Berlin-Kyiv international transport corridor No.3. The Lviv-Brody road's length is 80.2 km; the project's total investment volume is euro 163 m. The construction term is 6 years; the operating term is subject to negotiations. Two other toll road construction projects are currently open for bids: Kyiv-Vinnytsia (euro 466 m) and Russian border – Kyiv-Kharkiv-Dovzhinsky (euro 155 m). Private capital participation could be expanded in the sector if amendments were introduced to the legislation permitting road maintenance operations by private companies.

In the road transportation sector the Ministry of Transport introduced an initiative to improve the transit capacity of Ukraine by tackling the issue of 'local fees', i.e. fees charged by local authorities for passage of foreign cars and trucks through their territory. The collection of these fees is legally dubious but still practiced by some local authorities to raise additional revenue. By the Order of the Ministry of Transport localities are prohibited from collecting these fees.

A bottleneck became apparent in the transportation sector when the issue of insufficient permits for international freight transportation arose. Currently there is no centralized system of distributing these permits, provided to Ukraine through bilateral agreements with foreign countries on parity conditions. As Ukrainian imports decrease and exports increase, foreign countries do not wish to increase the number of permits to Ukraine. European freight transportation relies mainly on trucks and the competition in the sector is intense; thus the European countries want to leave Ukraine with a fixed quota of permits for passage through their territories. To protect their markets further, higher fees and tougher restrictions apply to the ecologically 'dirty' trucks, which abound in Ukrainian freight firms. At

²² Total spending also included about UAH 220 m of debt repayment for road construction and maintenance work carried out in 2001.

²³ <http://www.transmag.lviv.ua/>



present the criteria for permit distribution are not clearly defined, which frequently results in long line-ups of trucks at the border waiting for permits.

A positive development in privileged passenger transportation rules was noted, due to a decree of the Cabinet of Ministers²⁴, which obliges local councils to buy tickets for local council deputies to in line with their right to free transportation within their constituency. Previously, the transport enterprises bore the costs of providing this free service, for which they later on had to request compensation from the local governments²⁵, a complicated and uncertain procedure. The new rules are meant to decrease the unauthorised use of the privilege to use transport services, and to protect the transport enterprises from losses for this free service.

2.3.2 Prospects

Financing of road construction and maintenance should be more closely tied to road usage. An attempt should be made to include fuel taxes (excise tax) as an additional source of road financing to the currently levied car tax. Whereas local governments levy the car tax, the fuel tax could be spent on the maintenance of public roads. The Law of Ukraine "On sources of financing the road sector" should be amended to guarantee stable and adequate financing of the sector and relate to road usage.

To stimulate road construction concessions, it is necessary to strengthen the existing capacity to process concession tenders by establishing of a specific government regulatory body. It would insure that concession contracts are properly drawn up and that sound economic substantiations support the concessions. To enhance the attractiveness for private capital in the roads sector, the government should introduce changes into the legislation allowing for maintenance and operation of existing roads as well as for collection of shadow tolls. When determining concession fees the government should rely on the bidding process. It should also allow sufficient discretion to the regulatory body (yet to be created) when drawing up concession contracts.

Regulations concerning the distribution of permits for international freight should be adopted to avoid misallocations of permits and improper practices related to their distribution. Firms, who possess ecologically adequate trucks and regularly serve international routes, could be given a percentage of the permit quota for a particular country at the percentage level of the permit use in previous periods. A secondary market for trade in permits could be established to ensure efficient allocation of the remaining permits and the possibility of new entries into the industry.

²⁴ Decree of the Cabinet of Ministers "On rules and conditions of free transportation for the deputies of local councils", N 1738, 16.11.2002.

²⁵ Decree of the Cabinet of Ministers "On adoption of rules and conditions of free transportation for the deputies of local councils", N 702, 11.10.1994.



2.4 Power

2.4.1 Reforms, June - November 2002

The reforms in the power sector were suspended between June and November 2002. The election of the new parliament in April 2002 has not resulted in speeding up reforms in the industry. Though the new composition of parliament may be considered the most market oriented in ten years of transition, severe political tensions between different right wing and centrist parties prevented it from adopting most of the required economic laws. To establish a consistent governmental policy in this sector remains on the main agenda.

In November 2002 the newly appointed government declared its intention to gradually replace the existing pool model by a model of 'bilateral contracts'. Although fairly liberal, this model could negatively affect the Ukrainian economy in the foreseeable future, because it would likely cause a number of distortions. Thus, as long as the government is unable to enforce 100% payment for consumed electricity a switch to bilateral contracts will negatively affect competition in the industry. The most solvent consumers (like industrial enterprises) would be able to buy electricity at the lowest price, while other less solvent - but also major - consumers (like public utilities) would have to pay a much higher price. The government will also have to solve the problem of compensating subsidies to households, which are currently cross-subsidised by other consumers. If bilateral contracts are implemented, their enforcement will also require establishing a complex new legal system. It would also make the earlier investments into a performing pool model obsolete.

The government and the State Property Fund of Ukraine failed to sell 12 regional power distribution companies (oblenergots) according to the privatisation plan for 2002.²⁶ The State Property Fund selected experts under an open tender in order to assess the starting value of the 9 distributors who are to be sold during the coming year. However, the draft of privatisation revenues for 2003 submitted to Parliament foresees neither revenues to the state coffers from the sale of the power distributors nor to the generating companies. The indicators for commercialisation and privatisation remained therefore unchanged.

The average level of cash payments by the oblenergots to the wholesale electricity market increased to about 90% while the total level of payments passed the threshold of 90% during June-September (see Graph 4). However, in October and November 2002 the total and cash payments dropped to about 85% due to the seasonal increase in consumption by the communal utilities, which are among the biggest non-payers. Nevertheless, the increase in collection ratios is very substantial and according to the methodology described in Annex 2 the indicator 'final consumers collection ratio' was increased from 3.3 to 3.7. The Cabinet of Ministers approved several large non-monetary mutual settlements within the industry during

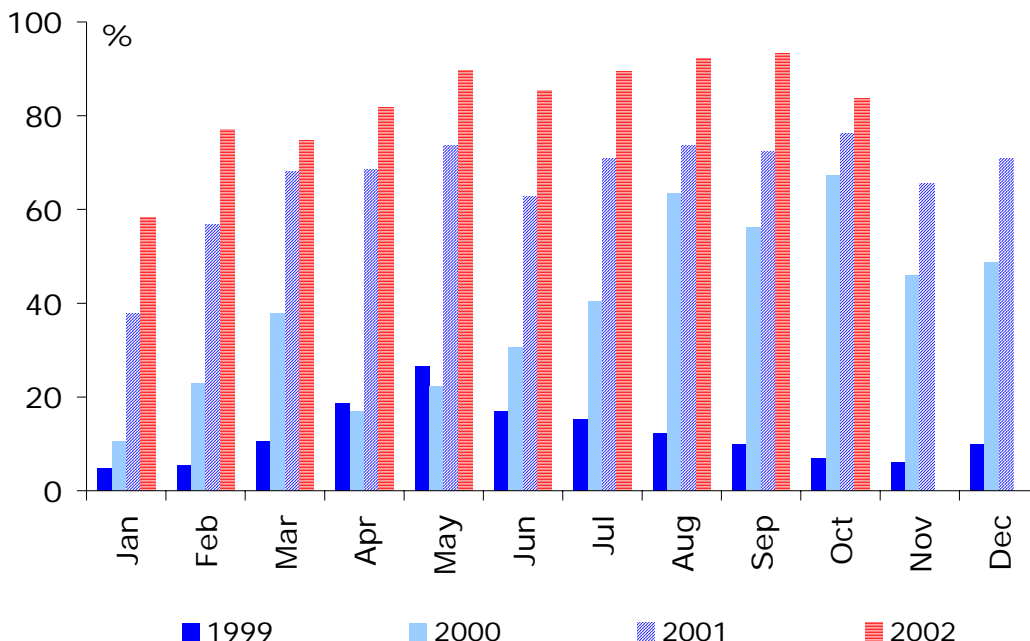
²⁶ As documented in previous IMU issues, there are 27 regional power distribution companies. The majority stock in 13 companies has been already been sold to private companies.



the past six months. Among the largest ones were the mutual settlements between “Energoatom” and Naftogaz, as well as JSK “Kharkivskiy Tractor Plant”, “Kharkivoblenergo”, “Dniπροenergo” and “Dnepropetrovskgaz”.

Graph 4

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



Sources: NERC; Energobusiness

The National Electricity Regulation Commission (NERC) substantially increased the number of regional distribution companies that are compensated for commercial transmission and distribution losses²⁷. The ratio of electricity losses to the amount consumed constituted about 18.26% during the first 8 months of 2002 and is extremely high compared to developed countries. The commercial losses amounted to about 5.96% of apparent consumption. Only three companies privatised in 1998 reported losses in nets below normative levels²⁸. At the same time the losses in nets for ten companies were in the range of 27 to 34%.

Between June and November 2002, the NERC often found itself in the role of ‘crisis manager’, which conflicts with its role of an independent regulator. Several times it changed the algorithm for money distribution from a special clearing account to solve the problem of the financial sustainability of the fossil fuel power generating plants at the expense of the nuclear power company “Energoatom” and of regional distribution

²⁷ Commercial losses in nets are all losses above the norm for electricity losses officially established for each oblenergo by the NERC. (For the procedure of compensation set by the NERC see IMU No.3)

²⁸ Sumyoblenergo (reported 12.24% vs. the normative 16.63%), Chernigivoblenergo (16.12% vs. 17.16%), and Poltavaoblenergo (10.25% vs. 11.31%)



companies. It introduced special deduction coefficients for oblenergos, corresponding to the amount of money paid to the wholesale electricity market and transferred this money to fossil fuel power generating companies. This measure was introduced since NAK Naftogaz Ukrayiny (Naftogaz) cut the natural gas supply due to accumulating arrears by the power generating companies. At the same time, the NERC and the government prohibit the oblenergos from disconnecting a number of consumers from the electricity supply, thus making it impossible for most of the oblenergos to achieve a 100% payments level. It also reduced the tariff for electricity generated by "Energoatom" though the latter claimed that even the previous tariff had not covered full costs. As a result of the NERC policy mentioned above, the indicator "transparency of regulation" decreased from 3.0 to 2.3.

2.4.2 Prospects

The government plans to continue with the privatisation of the remaining state owned oblenergos. However, there is no consensus on the time schedule, on the procedure 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.

Tariff policy should play a key role in solving the problems of the financial sustainability of the sector. Tariffs should be raised to cost-covering levels 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.

Enacting the laws "On the NERC" and "On the wholesale electricity market" by parliament would improve the regulatory situation. The NERC should stop the practice of solving the financial sustainability of one market participant at the expense of another, which leads to further market distortions in the industry. Regulations for the free access of independent suppliers to the transportation and distribution grids should also be included.

2.5 Gas

2.5.1 Reforms, June - November 2002

Naftogaz (Ukraine) and Gazprom (Russia) signed an agreement setting up the International Consortium on Management and Development of Ukraine's Gas Transit System (ICMDUGTS). The establishment of the Consortium was also foreseen in an agreement on a strategic partnership in the gas industry, signed by the Russian and Ukrainian prime ministers. According to the agreement, both companies will be equal partners. Initially the two companies will contribute USD 0.5 m each to the Consortium to conduct pre-investment research. The agreement creating



ICMDUGTS states that third parties may be also included in the consortium. In general the creation of the international consortium is expected to have a positive effect on the maintenance and development of the Ukrainian gas transit system's management, but according to recently signed agreements, its establishment may also have a negative impact on the Ukrainian market as a whole.

First, the documents do not provide any guarantee for free and non-discriminating transit of natural gas from the Caspian basin through Russian territory. Absence of such a provision in the agreement could negatively effect the security and diversification of the natural gas supply. Ukraine could lose substantial bargaining power in future negotiations on the price of imported natural gas and the possible transit of Caspian natural gas to Europe. Secondly, both Naftogaz and Gazprom face severe financial constraints to provide the required investments for the gas transit system (GTS). Gazprom was unable to maintain the required investment levels in the sector after 1990; hence the equipment is severely outmoded since Soviet times. Gas extraction fell from 643 billion cubic meters (bcm) in 1991 to 584 bcm in 2000. The estimated investment needs of Gazprom for 2001-2020 are estimated to be about USD 164-171 bn. Gazprom expects to attract a substantial share of these funds outside Russia. Thus, the likelihood of attracting the declared amount of investment for maintenance and development of the GTS by the current consortium seems rather questionable. Finally, and this is probably the most important point, neither agreement contains detailed provisions on the obligations and responsibilities of the two parties. For example, the following provisions are absent from the agreements: the duration of the management contract, the investment obligations of Gazprom, provisions on tariffs for Russian gas transit and import and their possible changes, detailed withdrawal conditions, employment guarantees, etc. It should be also be mentioned that a feasibility study for the ICMDUGTS has not yet been conducted; it is intended to be completed by August 20, 2003.

Russian Gazprom cut the natural gas transport from Turkmenistan to Ukraine by 50% at the end of November. According to Gazprom officials, this measure was in response to a USD 30 m debt by Itera, which is Naftogaz's agent for Turkmenian gas transit. However, Itera's officials denied the existence of any debts. Gazprom also proposed to Naftogaz its gas transit services for the year 2003. Currently Ukraine is the fourth biggest natural gas importer in the world and its natural gas market has become very profitable after the barter and non-monetary settlements were mostly abolished. Thus, the Gazprom measure aims at crowding out competitors from the Ukrainian market, which could result in Ukraine becoming 100% dependent on natural gas imports from Russia.

Naftogaz took a number of steps aimed at crowding out competitors from the supply segment of the market. Since July 2002 its subsidiary company "Gaz Ukrayiny" started supplying final customers with a monthly consumption of 100 thousand cubic meters (tcm) or more by direct contracts only. It also insisted on the same conditions applying to regional distribution companies and to Itera, which sells natural gas obtained for transit. Naftogaz also asked Itera not to sell to large industrial customers below its own prices. Thus, the monopolisation within the industry has increased and the indicator 'potentially competitive businesses' was

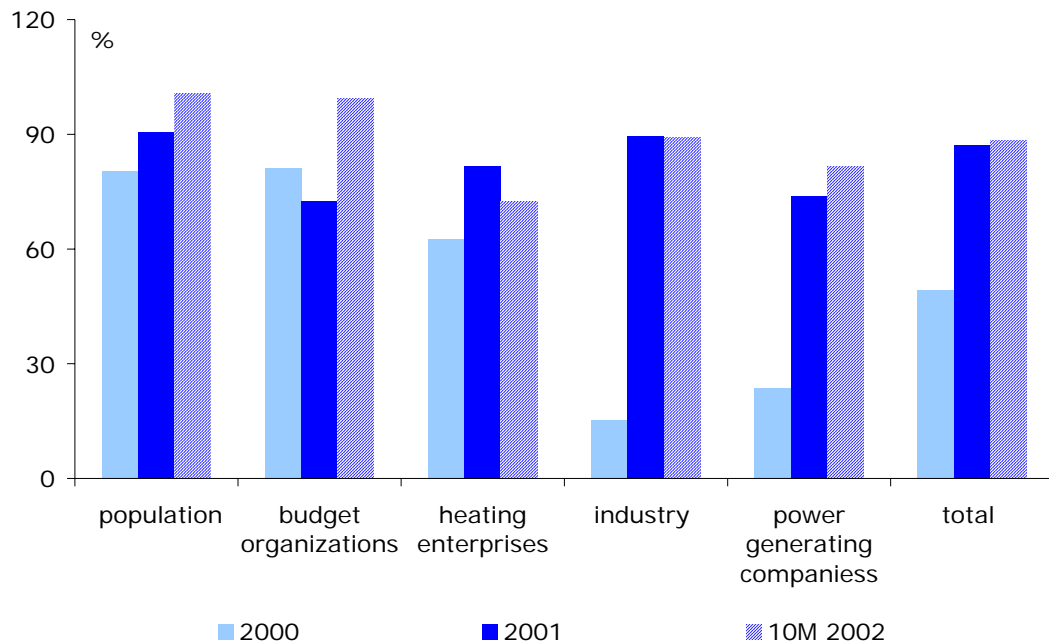


decreased from 2.7 to 2.0. The indicator 'potentially competitive business pricing' was decreased from 2.3 to 2.0.

The tariff policy has not substantially changed. Tariffs for private households, for budget organisations on all levels and for communal heating enterprises are much lower than those of industry, although one should expect the costs of supply to be much higher for private customers. Total payments and cash payments increased noticeably during the second and third quarters of 2002, compared to the previous period. During the first 10 months of 2002 consumers paid Naftogaz in cash for 89% of the gas they consumed. The corresponding amounts were 87%, and 49% for 2001 and for 2000 respectively (see Graph 5). Therefore, the grade was increased to 3.3²⁹.

Graph 5

Cash payments to NAK Naftogaz Ukrayiny as a percentage of the amount supplied



Sources: Ministry of Economy; Energobusines

Naftogaz paid 70.5% of its taxes due. The level of tax payment to the state for transit service was at about 54% of the level approved in the budget for three quarters. As a consequence the subsidies to other utility companies were not fully paid³⁰.

²⁹ During the first quarter of 2002 customers paid Naftogaz in cash for only 71% of the natural gas consumed and the grade was decreased from 3.3 to 2.7 (See IMU No.3, June 2002).

³⁰ For the details on communal utility subsidies through receipts from natural gas transit see IMU No.2.



2.5.2 Prospects

In order to ensure energy security and diversify, the natural gas supply to Ukraine has to include additional provisions on gas transit in the ICM DUGTS agreement. First, it should insist on the inclusion of provisions on gas transit from Russia to Ukraine similar to those in Article 7 of the Energy Charter Treaty³¹. This would ensure a secure gas supply from Caspian countries and from Russian oil producing companies that show an interest in selling their natural gas at the Ukrainian natural gas market. The following additional provisions should also be included in the revised agreement: the duration of the management contract, the investment obligations of Gazprom and of third parties in case they are included, tariffs for Russian gas transit and import and their possible changes, employment guarantees, and detailed procedure of one side withdrawal from consortium in case of other side failure to fulfil its commitments, etc.

As the Ukrainian experience has shown it is difficult to increase competition within the industry without splitting Naftogaz into three different companies Ukgazvydobuvannya, Ukrtransgaz and TD "Gaz Ukrayiny", all independent from one another. This step would also increase the attractiveness of the industry to foreign investors. However, it will be difficult to implement such a measure due to the very strong resistance of Naftogaz to it. Other necessary measures aiming at increasing competition are guaranteeing non-discriminatory access to transportation networks for potential natural gas importers, as well as transparent methodologies for determining access fees. The tariffs for transportation and distribution services should allow the natural monopoly operator to recover its cost as well as provide incentives for the natural monopoly to minimise costs.

The new government set achieving a 100% payment target level in the energy sector among its key priorities. However, it is difficult to achieve it without enforcement of such unpopular measures as disconnection of major non-payers from the gas supply and eliminating cross-subsidisation of one customer group by another. Though these measures might be painful and politically unpopular, it will remain impossible to attract investment to the industry unless the tariffs fully cover costs. There are now two years before the next presidential elections and more than three years before the elections to a new parliament. Thus, the political situation is rather favourable for such measures to be implemented. In conclusion it should be emphasised that price adjustments should be accompanied by meter installations in order to clearly prove to consumers what they are being asked to pay for.

³¹ As written in Article 7: *"(1) Each Contracting Party shall take the necessary measures to facilitate the Transit of Energy Materials and Products consistent with the principle of freedom of transit and without distinction as to the origin, destination or ownership of such Energy Materials and Products or discrimination as to pricing on the basis of such distinctions, and without imposing any unreasonable delays, restrictions or charges."*



2.6 Water and wastewater

2.6.1 Reforms, June - November 2002

The State Committee for Housing and Public Utilities continued working on its reorganisation and on separating itself from the State Committee for Construction and Architecture. According to the Decree on the State Committee for Housing and Public Utilities³² the Committee is responsible for government policy in over 30 communal service industries, including two natural monopolies, water and wastewater, as well as for heating. Concerning water and wastewater, the Committee develops government policy and regulates all water supply and water treatment facilities.

Currently the regulation of the industry is complicated by legal uncertainty. For instance, regulation of tariffs and the norms of consumption are a responsibility of both local state administrations (appointed by the President) and executive bodies of local communities (local governments)³³. The regulators are supposed to compensate for losses from their own sources if the service tariffs do not cover costs. Overlapping responsibilities of the different governing bodies introduce inconsistencies into the water service tariff regulations. At the same time the Committee, which is supposed to regulate the industry through licensing, can regulate only the water quality standards.

Since most local governments both own their utilities and regulate their water supply companies³⁴, this leads to some misuse of their regulatory powers. The local regulators often do not introduce regulations designed by the central government as, for instance, the procedure on tariff formation for centralized water supplies and wastewater treatment³⁵, or the procedure for bidding for domestic services³⁶. It would therefore be advisable for the Committee to play a larger role as the regulator of these companies, thus stimulating improvement of their managements.

The financial situation of the water supply companies remains very poor. In July 2002 the total receivables in the public utilities sector were UAH 8.49 bn, and payables were UAH 8.13 bn, which is the same as the levels in 2000 and 2001. The total receivables are 1.5 times higher than the yearly value of all communal services. The largest debtor is households (UAH 7.6

³² Presidential Decree "Regulation on the State Committee for Housing and Public Utilities", No.723/2002, August 19, 2002.

³³ Law "On Local Self Government in Ukraine", No. 280/97, May 21, 1997 and Law "On Local State Administrations", No. 586-XIV, April 9, 1999.

³⁴ Most water supply companies are owned by local communities (216 of 249 companies).

³⁵ Order of the State Committee for Construction, Architecture and Housing Policy: "On approval of the procedure on tariff formation for centralized water supplies and wastewater treatment", No. 139, June 26, 2001.

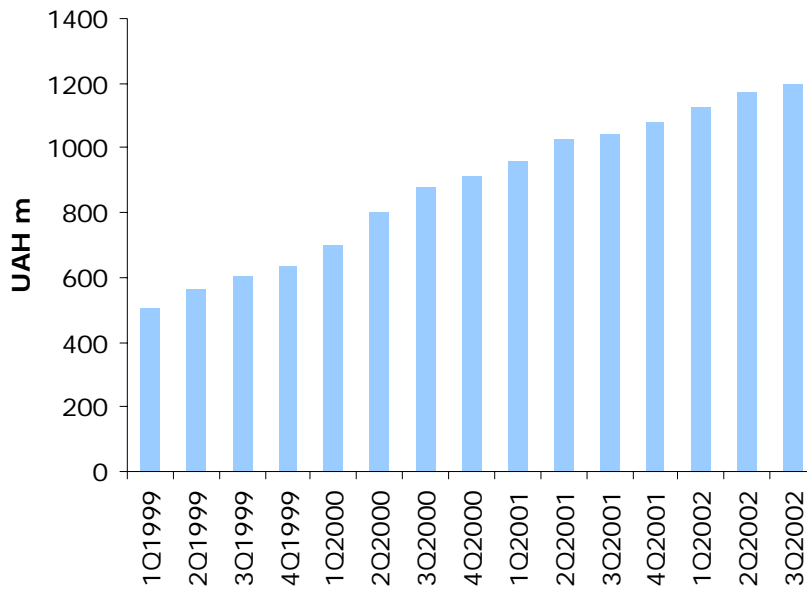
³⁶ Order of the State Committee for Construction, Architecture and Housing Policy: "On approval of the procedure for bidding for domestic services and for approval of a standardized contract for servicing houses", No. 194, September 7, 1998.



bn)³⁷. The share of the indebtedness for water supply and sewage treatment in the total indebtedness for public utilities between September 2001 and September 2002 fluctuated between 11.8% in March 2002 and 12.6% in September 2002³⁸. The indebtedness for water supply and sewage by households continues to steadily accumulate (see Graph 6³⁹), notwithstanding the fact that nominal household incomes have risen 21.3% in September 2002 compared to September 2001⁴⁰.

Graph 6

Indebtedness of households for water supply and sewage treatment



Source: State Statistics Committee of Ukraine

Since electricity represents more than 30 percent of the total cost of supplying water, water supply companies are major debtors to electricity distribution companies. A major consequence of the poor cash flow in the water supply industry is a shortage of investment in maintenance, and hence a serious deterioration of the water supply infrastructure⁴¹. In fact this approach is a transfer of water supply costs to future generations of users. The indebtedness for electricity is of course an issue of great concern for the electricity distribution companies⁴². According to the Law

³⁷ Speech of the Head of the State Committee for Public Utilities on the situation in the sector and on prospects for reforms; Committee meeting, July 2002.

³⁸ State Statistics Committee of Ukraine.

³⁹ Averaging about UAH 50 million per quarter.

⁴⁰ State Statistics Committee of Ukraine.

⁴¹ About 30% of the water supply network needs replacement.

⁴² In 2001 the total debt of public utility companies was UAH 760 m.



“On drinking water and drinking water supply”⁴³, non-paying consumers of water cannot be disconnected from the water supply. Any attempts of private electricity distribution companies to disconnect non-paying water supply companies are blocked by local governments. The accumulating indebtedness can be a consequence of both extremely unequal income distribution and low enforceability of payments for water consumed by households. Current attempts of electricity distribution companies to take over the operation of some water supply companies may improve the enforcement of payments. However this cannot solve the problem of income distribution and may even worsen the problem at the macro level because of cost manipulation within the electricity distribution companies⁴⁴.

Legal uncertainties as well as the weak regulations mentioned above are some of the major factors blocking the introduction into the sector of private capital or of capital from international financial institutions. In general, attracting non-public capital is a slow process. In November 2002 a World Bank project for water supply in Lviv was presented for ratification to the parliament of Ukraine.

2.6.2 Prospects

One of the major short-term goals of the government should be the introduction of contract relationships for the industry, especially applying to contracts with water consumers⁴⁵. Although such legislation already exists since 1997⁴⁶, there was not much progress with implementing it. Progress is so slow because both the local governments and the water suppliers see no benefits in introducing contracts. Local governments would have to increase the compensations to water suppliers or raise tariffs. The water suppliers would have to improve the quality of the water supply and improve delivery efficiency⁴⁷. The impact of introducing contracts for consumers is ambiguous. On the one hand it would likely result in increased tariffs, on the other hand metering could be introduced, leading to payment for consumed water only.

Recently the parliament of Ukraine adopted a law forbidding write-offs of household debts and regulating the conditions of its restructuring⁴⁸. The terms of restructuring are to be regulated by corresponding contracts.

⁴³ Law “On drinking water and drinking water supply”, No. 2918-III, January 10, 2002.

⁴⁴ So far attempts of the electricity distribution companies to take over the operations of water supply companies were blocked by the Antimonopoly Committee.

⁴⁵ Foreseen in the decree of the Cabinet of Ministers “On the reform and development of the utility sector from 2002 to 2005 and until 2010”

⁴⁶ Decree of the Cabinet of Ministers “On approval of the procedure for providing water supply, water sewage and heating services”, No. 1497, December 30, 1997.

⁴⁷ The Antimonopoly Committee has started a series of investigations into the public utilities sector. As a result of its investigations in Odessa, it has ordered to return UAH 11 m to consumers for water supply services not actually supplied between November 2000 and September 2001.

⁴⁸ Draft Law “On restructuring the indebtedness for rent, public utilities, gas and power”, adopted November 28, 2002.



However, this will be difficult to implement unless there also exist basic contracts for water supply, as discussed above.

In general a system of contracts would help to separate the twisted incentives in the sector. It would allow to better deal with the issues of wage arrears, shadow incomes and payments discipline. It is economically justifiable to charge higher rates to users with higher incomes. This is difficult to achieve when consumers are charged fixed rather than volumetric fees as is the case now in Ukraine. However, the problem could be solved if the fixed tariffs for water would be related to the property value (as is done in most market economies) rather than to the number of consumers. This would make richer families in Ukraine pay more regardless of their official and shadow incomes.

Since most local governments both own their utilities and regulate their water supply companies, this impedes implementing reforms in the sector, such as, the introduction of the procedure for tariff formation and the introduction of contracts. Strengthening the regulatory function of the Committee for Public Utilities and creation of an additional independent regulatory body for water supply could have a positive impact on reforms in the sector. The regulators should be able to influence through licensing not only the quality of service, but also the management efficiency of the water supply companies (including – if necessary – replacement of the management). Establishing such procedures could help to attract private companies to water supply company management in Ukraine. Management by private companies would appear to be a feasible alternative in the industry.



3 Appendices

Appendix 1

Infrastructure Indicator evaluation

| Indicator | Telecommunications | | | Railways | | | Roads | | | Power | | | Gas | | | Water and Wastewater | | |
|---|--------------------|------|------|----------|------|------|-------|------|------|-------|------|------|------|------|------|----------------------|------|------|
| | 00-N | 01-M | 02-N | 00-N | 01-M | 02-N | 00-N | 01-M | 02-N | 00-N | 01-M | 02-N | 00-N | 01-M | 02-N | 00-N | 01-M | 02-N |
| EBRD indicator | 2.5 | 2.5 | 2.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 3.0 | 3.5 | 3.5 | 1.5 | 2.0 | 2.1 | 1.5 | 1.0 | 1.0 |
| IERPC indicator | 2.3 | 2.4 | 2.2 | 2.3 | 1.3 | 1.4 | 1.5 | 1.5 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.4 | 2.5 | 2.5 |
| 1.0 Commercialization and privatization | 2.0 | 2.0 | 1.9 | 2.0 | 1.3 | 1.4 | 1.5 | 1.5 | 1.6 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 |
| 1.1 Ownership | 2.0 | 2.0 | 2.0 | 2.1 | 1.2 | 1.3 | 1.3 | 1.3 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 |
| 1.1.1 Natural monopoly | 1.3 | 1.3 | 1.7 | 1.7 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 | 3.3 | 3.3 | 3.3 | 3.3 |
| 1.1.2 Potentially competitive businesses | 2.7 | 2.7 | 2.3 | 2.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.3 | 2.3 | 2.7 | 2.7 | 2.7 |
| 1.1.3 Ancillary businesses | 2.0 | 2.0 | 2.0 | 2.0 | 1.3 | 1.7 | 1.7 | 1.7 | 1.7 | 2.3 | 2.3 | 2.3 | 2.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 1.2 Operation | 1.8 | 1.9 | 1.7 | 1.7 | 1.2 | 1.4 | 1.6 | 1.7 | 1.7 | 1.6 | 1.8 | 1.9 | 1.9 | 2.5 | 2.6 | 2.6 | 2.6 | 2.6 |
| 1.2.1 Natural monopoly | 1.7 | 2.0 | 1.7 | 1.7 | 1.3 | 1.3 | 1.7 | 1.7 | 1.7 | 1.3 | 1.7 | 2.0 | 2.0 | 3.0 | 3.3 | 3.3 | 3.3 | 3.3 |
| 1.2.2 Natural monopoly planning and investment decisions | 2.0 | 2.0 | 1.7 | 1.7 | 1.0 | 1.3 | 1.3 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 1.2.3 Private sector participation in service contracts | 1.7 | 1.7 | 1.7 | 1.7 | 1.3 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 2.0 | 2.0 | 2.0 | 1.7 | 1.7 | 1.7 | 1.3 | 1.3 |
| 1.3 Organizational structure | 2.2 | 2.2 | 2.1 | 2.1 | 1.4 | 1.6 | 1.6 | 1.6 | 1.7 | 2.3 | 2.3 | 2.3 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 1.3.1 Separation of natural monopoly and potentially competitive businesses | 2.3 | 2.3 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.3 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 |
| 1.3.2 Separation of ancillary businesses | 2.0 | 2.0 | 2.0 | 2.0 | 1.3 | 1.7 | 1.7 | 1.7 | 1.7 | 2.0 | 2.0 | 2.0 | 2.0 | 1.3 | 1.3 | 1.7 | 1.7 | 1.7 |
| 1.3.3 Decentralization | 2.3 | 2.3 | 2.3 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.7 | 1.7 | 1.7 |
| 2.0 Tariff reform | 2.6 | 2.6 | 2.6 | 2.7 | 1.4 | 1.5 | 1.7 | 1.8 | 1.8 | 2.2 | 2.1 | 2.1 | 2.0 | 2.2 | 2.5 | 2.6 | 2.6 | 2.6 |
| 2.1 Structure of tariffs | 2.3 | 2.4 | 2.4 | 2.6 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 2.1.1 Political vs. regulated operator's | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.7 | 1.7 | 1.7 | 1.7 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2.1.2 Natural monopoly pricing | 2.3 | 2.3 | 2.3 | 2.7 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.7 | 1.7 | 1.7 | 1.7 | 2.7 | 2.7 | 2.7 | 2.3 | 2.3 |
| 2.1.3 Potentially competitive businesses pricing | 2.7 | 3.0 | 3.0 | 3.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.7 | 2.7 | 2.7 | 2.7 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 2.2 Payments | 3.0 | 3.1 | 3.1 | 3.2 | 1.7 | 1.9 | 2.3 | 2.6 | 2.6 | 2.5 | 2.3 | 2.2 | 2.3 | 1.9 | 2.8 | 2.9 | 3.0 | 3.0 |
| 2.2.1 Intraindustry payments ratios | 3.0 | 3.0 | 3.0 | 3.3 | 1.3 | 1.7 | 2.3 | 2.7 | 2.7 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2.2.2 Final consumers collection ratios | 3.0 | 3.3 | 3.3 | 3.3 | 2.0 | 2.3 | 2.7 | 3.0 | 3.0 | 2.7 | 2.7 | 2.3 | 2.3 | 2.0 | 3.0 | 3.3 | 3.7 | 3.7 |
| 2.2.3 State indebtedness | 3.0 | 3.0 | 3.0 | 3.0 | 1.7 | 1.7 | 2.0 | 2.0 | 2.0 | 1.7 | 1.3 | 1.3 | 1.7 | 1.7 | 2.3 | 2.3 | 2.3 | 2.3 |
| 2.3 State funding | 2.4 | 2.4 | 2.4 | 2.4 | 1.7 | 1.7 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 2.3.1 Subsidies level | 2.7 | 2.7 | 2.7 | 2.7 | 1.3 | 1.3 | 1.7 | 1.7 | 1.7 | 2.0 | 2.0 | 2.0 | 1.7 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 2.3.2 Subsidies procedure | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 3.0 Regulatory and institutional development | 2.4 | 2.4 | 2.2 | 2.1 | 1.2 | 1.2 | 1.3 | 1.3 | 1.3 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.4 | 2.1 | 2.2 |
| 3.1 Effective regulatory institution | 2.4 | 2.6 | 2.3 | 2.2 | 1.3 | 1.4 | 1.5 | 1.5 | 1.5 | 2.0 | 2.1 | 2.1 | 2.2 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 3.1.1 Management selection of competitive businesses | 2.7 | 2.7 | 2.3 | 2.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 3.1.2 Independence of regulator, insulation from political influence | 2.3 | 2.7 | 2.3 | 2.3 | 1.0 | 1.0 | 1.3 | 1.3 | 1.3 | 2.0 | 2.0 | 2.0 | 2.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 3.1.3 Transparency of regulation | 2.3 | 2.3 | 2.0 | 2.0 | 1.7 | 2.0 | 2.0 | 2.0 | 2.0 | 1.7 | 2.0 | 2.0 | 2.3 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 3.2 Access regulation | 2.3 | 2.3 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.7 | 2.7 | 2.7 | 2.7 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |



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 given in Appendix 1 (June - November 2002)

TELECOMMUNICATIONS

1.0 Commercialisation and privatisation

1.1 Ownership

- 1.1.1 Dramatic investment activity by Ukrtelecom continues with about 40% of all new resources directed toward modernisation and replacement of old telephone stations. In particular, Ukrtelecom intends to lay 1,000 km of fibre-optic cable and to activate about 350,000 phone numbers in 2002. Assuming that the SCCI forecasts concerning the total number of telephone numbers to be introduced (500,000) are correct, the share of Ukrtelecom decreases only marginally and parity between the private and public shares in the fixed-line segment is preserved.
- 1.1.2 Developments in the segment of potentially competitive businesses during the period were controversial. In the long-distance call segment the last 10% of Utel shares were transferred to public ownership, which is considered as a negative change. New licenses for international connections were not issued. At the same time, the stricter control over licensing of international telephone operators can be considered as positive development, though it might lead to a decrease in the number of agents providing such services in the short run. Privatisation of the state ownership in UMC and the option to purchase the remaining state share in the company represent positive changes in the ownership structure of the mobile phone segment. Therefore, the indicator was increased to 2.7.
- 1.1.3 No significant changes in the ownerships structure of auxiliary businesses were detected during the second part of 2002.

1.2 Operation

- 1.2.1 The SCCI retains both its regulatory and commercial functions in Ukrtelecom. Although disconnections of private operators from the Ukrtelecom network in the spring was approved by the AMC, the way of conducting these disconnections testifies to a significant use of monopolistic power by Ukrtelecom, which is just on the border line between legal and illegal practices.
- 1.2.2 Strong political influence on the natural monopoly's management persists in the sector. In particular, every change in the sector, including tariff setting, is always evaluated in terms of its influence on the investment attractiveness of Ukrtelecom. Also, the high rates of new line introductions and the considerable investment being made are likely to be subordinated to the same considerations.



- 1.2.3 No significant changes were noted in the structure of the companies who develop and maintain the telecommunication networks. A significant share of private activity exists only in the mobile segment.

1.3 Organisational structure

- 1.3.1 Though the major ownership of UMC was privatised, this cannot be considered as progress as far as the separation of potentially competitive enterprises from the natural monopoly is concerned, since UMC previously operated as an independent, though public, unit. The decrease in the number of IP-telephony companies was mainly due to the disconnection of operators, who did not have appropriate licenses. This cannot be considered a deterioration.
- 1.3.2 The organizational structure of auxiliary businesses remained unchanged.
- 1.3.3 Changes in the ownership structure of Golden Telecom and "Kyivstar GSM" may have potentially negative consequences from a decentralisation point of view, since both companies are likely to fall under partial control of the Russian "Alpha Group" company. At the moment no significant changes were noted in the decentralisation of decision-making among the major operators of telephone services.

2.0 Tariff reform

2.1 Structure of tariffs

- 2.1.1 The establishment of an independent regulator for the field of telecommunications is still on the agenda. The number of privileged consumer categories in the fixed-line segment has not changed. Besides, all efforts to change tariffs, such as rebalancing the tariffs for the fixed-line segment and parliament's attempt⁴⁹ to abolish charges for incoming calls, are quite controversial because they appear to be governed by political considerations.
- 2.1.2 Due to the fixed-line telephone service tariff rebalancing (tariff increases for local calls and decreases for international ones) the indicator was increased to 2.7. However, the tariffs for telephone service in rural areas need still to be reviewed.
- 2.1.3 Increases in tariffs for IP-telephony services, which used to be seen as dumping ones established by fraudulent schemes by non-licensed operators, are considered a positive development. While adoption of the law on abolishing charges for incoming calls for mobile operators can be considered as premature, poor regulations on interconnections persist.

2.2 Payments

- 2.2.1 Phone usage is normally paid for, except for some cases like state authorities, which cannot be disconnected for legal reasons. Improvements in intra-industry payments due to an antifraud campaign have allowed the indicator to be increased to 3.3.

⁴⁹ So far the President has not signed the law.



2.2.2 No substantial progress compared to the previous period particularly for privileged categories.

2.2.3 The state indebtedness level is low but constant and is still not eliminated.

2.3 State funding

2.3.1 The numbers of privileged categories of phone users as well as the subsidy level remain stable.

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-subsidization 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. Minor improvements can be observed, i.e. the privatisation of UMC.

3.2 The political independence of the SCCI is low, as can be seen from the activities of Ukrtelecom, for which it is responsible and which violates major international principles of regulation, namely to separate its regulatory and commercial activities.

3.3 The transparency of regulation is low especially concerning the regulation of interconnections. An antifraud campaign initiated by the SCCI and Ukrtelecom was performed in a non-transparent manner and raised many complaints from other telecommunication operators. While the disconnections were approved by the AMC, SCCI and Ukrtelecom made no attempts to compensate final consumers for damages, or to avoid some cases by employing more transparent procedures.

3.2 Access regulation Access is provided by a spectrum of allocation tenders and operations licensing. Administrative barriers to entry into the international and long-distance telephone calls segments persisted and are likely to be maintained until Ukrtelecom is privatised. Minor improvements can be observed in the field of licensing control over operators. The antifraud campaign was performed in a non-transparent manner, suggesting that the decisions of the state-owned operator were arbitrary.

RAILWAYS

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 The basic rail network is 100% state owned. Sales 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. Therefore the index was increased from 1.3 to 1.7.



1.1.3 The construction, maintenance and service enterprises are corporatised; privatisation is foreseen as a second stage.

1.2 Operation

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

1.2.2 The principle goals of the State Railways Administration are operational efficiency and profitability of the industry. Cost-benefit analyses for investment projects are being made.

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. The corporatisation of freight transportation enterprises is completed, being united in an association of enterprises called "Ukrpromzaliztrans". More attention is given to financial performance of individual enterprises. The score was increased from 1.0 to 1.3.

1.3.2 Ukrzaliznytsia is charged with the management of plants producing railway ties.

1.3.3 The railways are split into 6 regional companies each with the right to set tariffs for their services independently. Municipal authorities may regulate privileged category tariffs while providing offsetting compensation. Regional companies can reduce the intensity of unprofitable suburban transportation or cancel entire suburban routes, provided the local government does not object.

2.0 Tariff reform

2.1 Structure of tariffs

2.1.1 Transportation service tariffs are set for political reasons, in order to cross-subsidise passenger transportation overall and privileged passengers in particular, since there are not enough funds in the state coffers. Privileges for freight continue to be granted to certain enterprises. A price control department was created within the Ministry of Transport.

2.1.2 Fixed costs are not covered; cross subsidisation of passenger transportation with freight transportation persists.

2.1.3 Tariffs do not reflect infrastructure and rolling stock operating costs.

2.2 Payments

2.2.1 Intra-industry debts decreased slightly.

2.2.2 Monetary payments for freight transportation are about 97%. The level of barter operations is as low as 2%.

2.2.3 State subsidies are provided at levels set in the state central budget.

2.3 State funding



2.3.1 85% of passengers transported locally do not pay for transportation. There are 16 categories of privileged passengers, although within these categories the number of the privileged is restricted. The government still relies on 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.

3.1.2 The railways regulator is a 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.

3.1.3 Tariffs are fixed by legislation; tariffs changes are discussed within the government. Transport tariff policy is being developed to increase the transparency and efficiency of tariff setting.

3.2 **Access** is regulated with government permission.

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 and 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 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 Financial monitoring of the enterprises was introduced to avoid artificial bankruptcies and promote sound financial practices. More emphasis was put on developing concession projects. Two concession projects are about to start.

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 now 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 rating was increased from 1.3 to 1.7.

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 derives from an excise tax on fuel, although the law is not yet enacted. The tax is directed to the general state coffers. The cross subsidisation level is low. 70% of the urban transportation rolling stock and 15% of the urban transportation infrastructure are close to breaking down.
- 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 are modest.
- 2.2.2 Barter operations were temporarily prohibited by an order of the Minister of Transport.
- 2.2.3 The state still finances the sector at inadequate levels. However the nominal budget allocation for roads increased and the arrears for previously performed work are being paid off. The score increased from 1.3 to 1.7.

2.3 State funding

- 2.3.1 The number of privileged passengers, who are subsidized, reached 70% of total passenger transportation. From 30% to 80% of all passengers do not pay for transportation, depending on the region. Subsidies provided out of central government funds cover only 2.5 trips per month per privileged passenger⁵⁰.
- 2.3.2 Subsidies are paid to the road operator.

3.0 Regulatory and institutional development

3.1 Effective regulatory institutions

- 3.1.1 The government appoints the roads operating management.
- 3.1.2 Road Service of Ukraine, the regulatory body in the sector, is organisationally separated from the government.

⁵⁰ Information disclosed by the Head of "Ukrelectrotrans" corporation, Stanislav Beikul.



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. The licensing procedure remains non-transparent.

POWER

1.0 Commercialisation and privatisation

1.1 Ownership

1.1.1 The controlling stakes in 13 (out of 27) regional distribution companies (oblenergос) 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, now **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.

1.2 Operation

1.2.1 Regional distribution companies are stock companies and 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 oblenergос.

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.

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 exerted on the independent regulator.

2.1.2 Cross subsidisation of households, agricultural producers and of closing coal mines by the industry still takes place, and cost reflection is not unambiguous.

2.1.3 The performance of the wholesale electricity market is far removed from market requirements.

2.2 Payments



- 2.2.1 The situation improved significantly, but some settlements are still made in non-cash form.
- 2.2.2 The collection rate was below 100% but cash payments increased up to 90%. Therefore, the grade was increased from 3.3 to 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 oblenegos.

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 The new methodology of tariff setting based on a rate-of-return regulation was partially implemented due to strong political interference. NERC made a number of changes concerning the money distribution from the wholesale market clearing account, which are aimed at solving the financial sustainability of one market participant at the expense of another. The grade was decreased from 3.0 to 2.3.

- 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 property in gas extraction is very high, private companies have been involved in gas imports. The competition in the supply segment of the industry substantially decreased due the monopolistic behaviour of Naftogaz. Consequently, the grade was decreased from 2.7 to 2.0.
- 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, however, 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.

2.3 Tariff reform

2.4 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 A private company carries out a substantial part of gas imports. Naftogaz influenced prices of private supplies by administrative measures. The indicator declined from 2.3 to 2.0.

2.5 Payments

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

2.2.2 The payment collection rate (including cash payments) substantially increased. Therefore, the indicator was increased from 2.7 to 3.3.

2.2.3 The state remains among the major debtors; however, its indebtedness remained rather stable.

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



WATER AND WASTEWATER

1.0 Commercialisation and privatisation

1.1 Ownership

- 1.1.1 The natural monopolies (water distribution and drainage systems) are mostly in communal ownership. Out of 239 companies 216 are communal enterprises, 15 are joint stock companies, 5 are state enterprises and there are 3 others. At least one JSC, "Donvuglevodokanal", is a privatised company. The indicator was increased from 1.0 to 1.3.
- 1.1.2 Most potentially competitive businesses (water supply and wastewater treatment) are still integrated with the natural monopolies and are in communal ownership. However one company was privatised and initial steps towards separation were taken in another case. Hence, the indicator was increased from 1.0 to 1.3.
- 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 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 is 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. Progressive 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 power distribution companies. The total payables of the industry are estimated to be almost UAH 1 bn.
- 2.2.2 Collection rates from households have remained at 80%. Household indebtedness continues to accumulate at an average rate of UAH 16.5 m per month.
- 2.2.3 The local governments fulfil their obligation concerning financing of privileged consumers at the level of about 55%, which is 8% higher than for the same period of the previous year, but is UAH 120 m lower in absolute terms.

2.3 State funding

- 2.3.1 The poorest households are subsidised. The amount of subsidisation varies substantially between regions. Parliament has adopted a law, which forbids debt write-offs and regulates their restructuring, although the law has still not come into effect.
- 2.3.2 Subsidies are paid to the providers of water supply and to 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; justifications for the decisions are not disclosed.
- 3.2 **Access regulation** There are no rules for access.