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Republic of Ukraine Transport Sector Review

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CURRENCY UNITS and EQUIVALENTS

US$1	=	Hrv 2.0
1Hrv	=	100 Kopeck
US$1	=	USc 100

WEIGHTS, MEASURES and OTHER UNITS

Bln	Billion
Inh	Inhabitant
Kg	Kilogram
Km	Kilometer
Mln	Million
Pass	Passenger
pkm	passenger kilometer
sq km, km^2	Square kilometer
T	Ton (meteric, 1,000 kg)
Th	Thousand
tkm	ton kilometer
Toe	Ton oil equivalent
Vpd	Vehicles per day

CONVERSION FACTORS

1 mile =	1.609 meters
1 kg =	2.205 lbs
1 US gallon =	3.785 liters
1 sq km =	0.386 square miles

CHEMICAL COMPOUNDS

C_xH_y, HC	Hydrocarbons
CO	Carbon Monoxide
CO_2	Carbon Dioxide
NO_x	Nitrogen Oxides
SO_2	Sulfur Dioxide

FISCAL YEAR

January 1 - December 31

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ATC	Air Traffic Control
CIS	Commonwealth of Independent States
CMEA	Council for Mutual Economic Assistance
EBRD	European Bank for Reconstruction and Development
EU	European Union
FIATA	Fédération Internationale des Associations des Transitaires et Assimilés (Intl. Federation of Associations of Freight-forwarders and Related Services)
FOB	Free-On-Board
FSU	Former Soviet Union
GATT	General Agreement on Tariffs and Trade
GDI	Gross Domestic Investment
GDP	Gross Domestic Product
GNP	Gross National Product
IMF	International Monetary Fund
MOT	Ministry of Transport
EIA	Environmental Impact Assessment
OECD	Organization for Economic Cooperation and Development
PIP	Public Investment Plan
SAC	Structural Adjustment Credit
SOE	State Organizations and Enterprises
TACIS	Technical Assistance for Commonwealth of Independent States
TIR	International Road Transport
UZ	Ukrzaliznytsia (Railway Administration)
VAT	Value Added Tax
WTO	World Trade Organization

UKRAINE

TRANSPORT SECTOR REVIEW

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ACKNOWLEDGEMENTS

The Review is based on findings of a World Bank mission, which visited Ukraine in May/June 1998, and a Transport Policy Workshop, which followed it on June 29 – July 3, 1998.

The members of the mission were P. N. Taborga (mission leader); Robert Bonney (Highway Specialist); Jean-Paul Desgranges (Aviation Specialist); Jan-Coen van Elburg (Environment Specialist); Parbo Juchnewitsch (Railway Reform Specialist); Rene Meeuws (Containerization Specialist); Philippe de Naurois (Senior Financial Analyst); Gerald Ollivier (Financial Analyst); Ovadia Salama (Transport and Trade Facilitation); Olev Schults (Railway Specialist); Carlos Silva (Institutional Reform Expert) and Eugene Vernigora (Maritime and River Specialist).

The Ministry of Transport and the *Ukrainian National Agency for Development and Investment* were the main counterparts of the mission on the Ukrainian side. The study has relied heavily on official sources of information and statistics as well as interviews and meetings with Government ministries and agencies. It also draws on on-going World Bank and IMF work on the macro-economic conditions of the country, other sector work, studies supported by EU, EU-TACIS and EBRD, cross country comparisons and other sector benchmarks. The mission gratefully acknowledges the suggestions received from Ms. Jann Masterson and Mr. Mark Davis, and the final updating of the report by Ms. Shobha Subramanian.

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UKRAINE
TRANSPORT SECTOR REVIEW
POLICY NOTE

[Policy: the nature of the solution to a class of problems.]

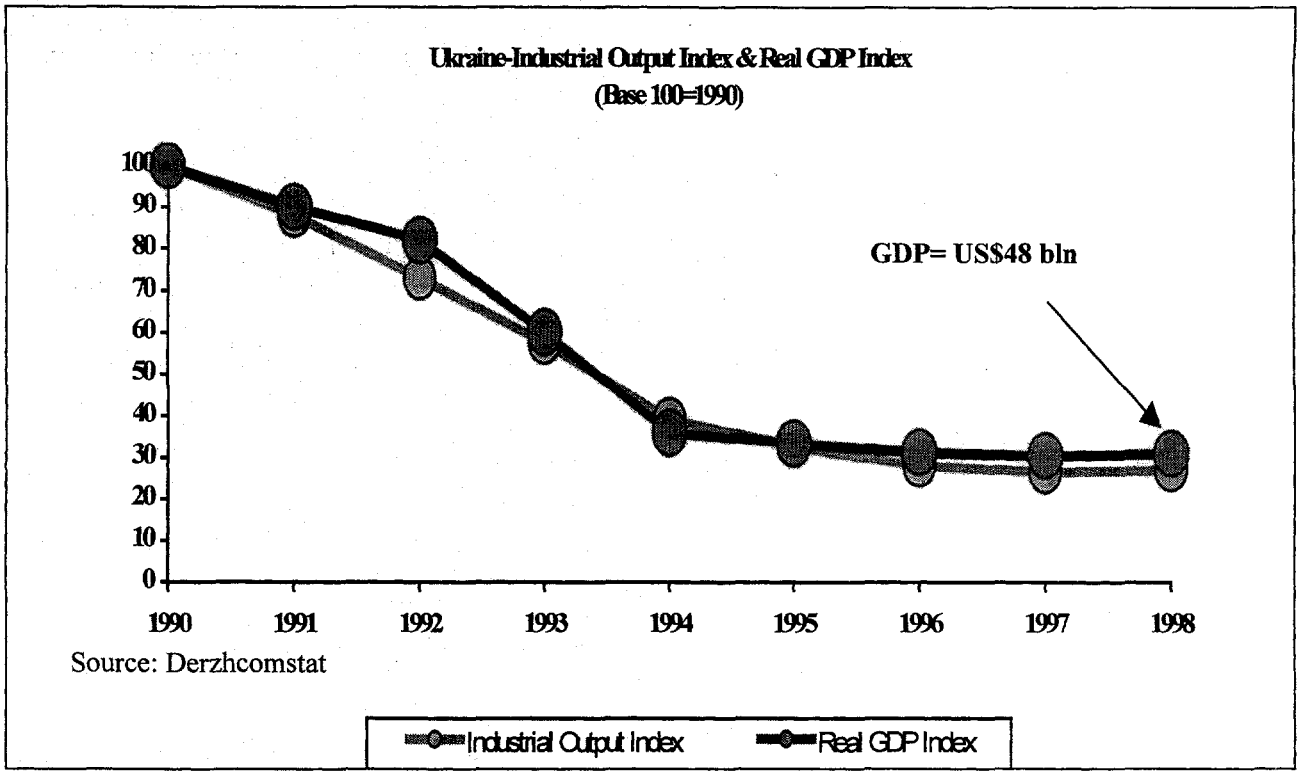
A. INTRODUCTION

1. This report reviews the current situation of Ukraine's transport sector, follows with a vision of a reformed transport sector in a market economy, and suggests the steps necessary to the transition. It is based on the findings and recommendations of two transport sector missions that visited Ukraine in June and July, 1998. It shows: (a) the extreme seriousness of the transport sector situation; (b) the need to continue developing the macro-economic policy framework and stimulate growth of the private economy; and (c) transport flows and investment levels reflecting: (i) the contraction of trade and economic activity in Ukraine and (ii) the economic prospects of neighboring countries.

The Economy

2. **Recent Economic Performance.** The transformation of Ukraine's economy from a centrally planned system to a market-oriented one has proven to be a daunting challenge. Policy shortcomings during the first three years of Ukraine's independence, combined with major external shocks led to macroeconomic instability and contraction of all sectors. Between 1990 and 1993 agricultural production fell 20 percent, industry contracted 45 percent, and construction declined 54 percent. Recorded unemployment remained limited, disguised unemployment became widespread, affecting 3-5 million workers. By 1994, officially recorded output had fallen by more than 50 percent since 1990 and inflation, while coming down from hyperinflationary levels, was still in triple digits. Although the fiscal deficit was reduced by 1994, the current account deficit had widened and the situation had become increasingly tenuous, i.e., a large accumulation of payment arrears (mainly on gas imports from the FSU). Living standards deteriorated sharply and poverty increased. By 1994, the public finance deficit exceeded 8 percent of GDP, the current account deficit was around 6 percent of GDP, the stock of external debt (including arrears) reached US$7,200 million, and international reserves covered only 2.4 weeks worth of imports.

3. **Reform Program and External Support.** In October 1994, a clear break was made from past policies as Ukraine began to lay the foundation for macroeconomic stabilization and structural reforms. An IMF-supported stabilization program (through a systemic transformation facility, and three stand-by arrangements) entailed tight fiscal and monetary policies with the aim of lowering inflation to about 1 percent monthly. The World Bank has supported a wide-ranging series of measures aimed at reducing Government intervention in the economy, developing competitive markets and introducing elements for a social safety net through a Rehabilitation Loan followed by adjustment loans in enterprises, agriculture and energy sectors.



Source: Derzhcomstat

4. **Impact of Reform.** Significant progress was accomplished over the following four years. Inflation has been sharply reduced (to 40 percent annually in 1996 and 16 percent in 1997). The exchange rate was unified and substantial degree of current account convertibility established; a new currency was successfully introduced. The trade regime has been liberalized. Domestic prices have been partially decontrolled, consumer subsidies partially reduced and energy prices increased to world level for non-household users. Purchasing power has been restored somewhat in the recorded economy. Tax reform has been initiated, the state order system has been abolished. A mass privatization program is being implemented; agriculture land reform is being initiated; and a restructuring of the electricity and coal sectors is underway.

5. **Remaining Challenges.** A number of factors pointing to the fragility of these early successes indicates the considerable challenges ahead in securing macroeconomic stability and restoring growth.

- **First,** the stabilization effort is fragile. Tight monetary policy has not been accomplished by sufficient structural measures to reduce expenditures. In effect, the fiscal situation appears better than it is; the cash deficit was contained to a substantial extent by running up arrears and postponing expenditures. This is clearly not sustainable and the Government needs to address the immediate precarious fiscal situation in addition to key structural causes of fiscal imbalance.

- **Second,** economic activity remains weak. Officially recorded GDP fell by a further 10 percent in 1996 and continued to fall, albeit at a slower rate, during 1997. Much private activity appears to be channeled into the unrecorded economy, which is substantial and growing. Although the informal economy has cushioned the impact of the decline in

officially recorded GDP, it also has a negative side; it reduces the tax and foreign exchange base and makes macroeconomic stability that much harder to sustain.

- **Third,** the pace of reform has slowed down. There have been setbacks in several areas of the reform program, notably the slow progress in tax reform, the inability to achieve greater cost recovery in most of the sectors, in the slow progress in reforming the agricultural sector. There has also been a tendency to create or reinforce monopolistic state structures, notably in agriculture, to handle market activities. The anticipation of Parliamentary and Presidential elections throughout 1997 contributed to delays in implementation of politically sensitive reforms.

6. **Major Transport Sector Issues.** The situation across the Transport Sector can be summarized on issues as follows:

a) The pace of reform in the sector needs to match the evolution of macro-economic policies to take full advantage of the opportunities offered;

b) The asset base of the transport sector is eroding, and rehabilitation, maintenance and renewal backlogs are mounting;

c) Traffic, which has contracted sharply, is likely to show a modal split different from the traditional one, with greater reliance on road transport in international trade to Europe, once sustained economic recovery is achieved;

d) Technical innovation and technological upgrading needs are not being sufficiently addressed; and

e) There is a need for continued institutional and pricing reforms across sector institutions.

7. **Lack of Policy Framework.** The macro-economic policy framework is still being developed. So far, this has encouraged the growth of rent seeking and informal taxation outside established legal structures. This situation increases costs to producers and traders while forcing some economic activity underground. It also leads to tax evasion with a shortfall in State revenues. In the case of the transport sector, it has slowed down the removal of price controls, the adoption of adequate cost recovery mechanisms, and has delayed privatization.

8. **Growth Prospects.** Growth would not be sustainable without an opening of borders to the expansion of trade. Continuing contraction of the Russian economy and disruption of trade are the main reasons for the difficult economic situation. The Government recognizes that the key to economic recovery will be the implementation of a comprehensive program of reform combining stabilization policies, structural adjustment and privatization. Such a program already started with World Bank, IMF and other external support. Since such measures will take some time to take hold, the demand for transport is expected to remain significantly depressed (e.g., below 1990 levels) at least in the near future.

Agenda for Change

9. The program of reforms now under way emanates from four premises: (i) consolidation of the new role for the State with a reduced Government size; (ii) creation of an enabling environment

for private and foreign investments and for the development of competitive markets; (iii) attainment of macro-economic stabilization; and (iv) divestiture of state owned means of production through privatization. The change process in the transport sector is discussed in Section E.

10. **Role of the State and Government Size.** A major change is planned to take place in the role of the State throughout the economy, and in particular, in the transport sector. The State would renounce its current role as the only significant owner, decision maker and operator in most economic activities, and would assume a subsidiary role instead. This implies that the State would not run businesses or services, hold monopoly positions, or participate directly in productive activities. Furthermore, micro-management in an attempt to determine final outcomes would be avoided. The new role of the State is to implement the policies necessary to: (i) assure transparency in markets for goods and services; (ii) allow price flexibility as a response to market signals; (iii) ensure freedom of entry and exit from markets; (iv) divest from State monopolies; and (v) allocate State assets by means of bidding of limited rights over scarce public resources.

11. **Creation of an Enabling Environment.** An enabling environment provides the measures to allow entrepreneurs the perception of fairness, openness and freedom from intervention and set the rules for true competition. It does not include assurances of profitability. The subsidiary role of the State is a necessary condition, but it is not sufficient. In addition, the following elements need to be present: (i) open, de-regulated capital markets; (ii) availability of foreign exchange at or close to its opportunity cost; (iii) non-confiscatory tax systems; (iv) clear property rights under the law; (v) no distinction between "national" and "foreign" private sectors, vis-a-vis all relevant legislation; and (vi) the perception of an unwavering purpose to implement and uphold (i) through (v) above on the part of the public authorities.

12. **Economic Stabilization.** The necessary steps for consolidating macro-economic stabilization are: (i) continued rigorous management of public finance and the balance of payments; (ii) reforming the State to support a market economy and reorienting government spending; (iii) developing transit services and their impact on the Ukrainian economy; and (iv) improving public sector management and performance. All of these steps are under consideration.

13. **Privatization.** Privatization implies the transfer of production responsibilities from the public to the private sector. Accordingly, the State would renounce ownership of the productive undertakings it currently possesses by selling them to the private sector. This transfer can take various forms, depending on the circumstances, the amounts involved, how quickly it is to be effected, and the entity concerned. Increasingly, the State would act by omission, if it is absent from the scene, the private sector can take shape, grow and develop. An active State presence tends to inhibit, weaken and, in most cases, prevent the private sector from functioning effectively.

B. THE TRANSPORT SECTOR

14. **Traffic Contraction.** The transport sector shows significantly reduced traffic flows in all modes compared with those of only a few years ago. About one half of 1990 passenger traffic was observed in 1997, while freight volumes in 1997 were at 30% percent of 1990 levels. Even under a scenario of vigorous trade expansion, significant traffic recovery in the short to medium term is not likely (see Figures 1 and 2 below and Chapter 4 of Technical Report).

Figure 1: Traffic Actual and Forecasts, Freight

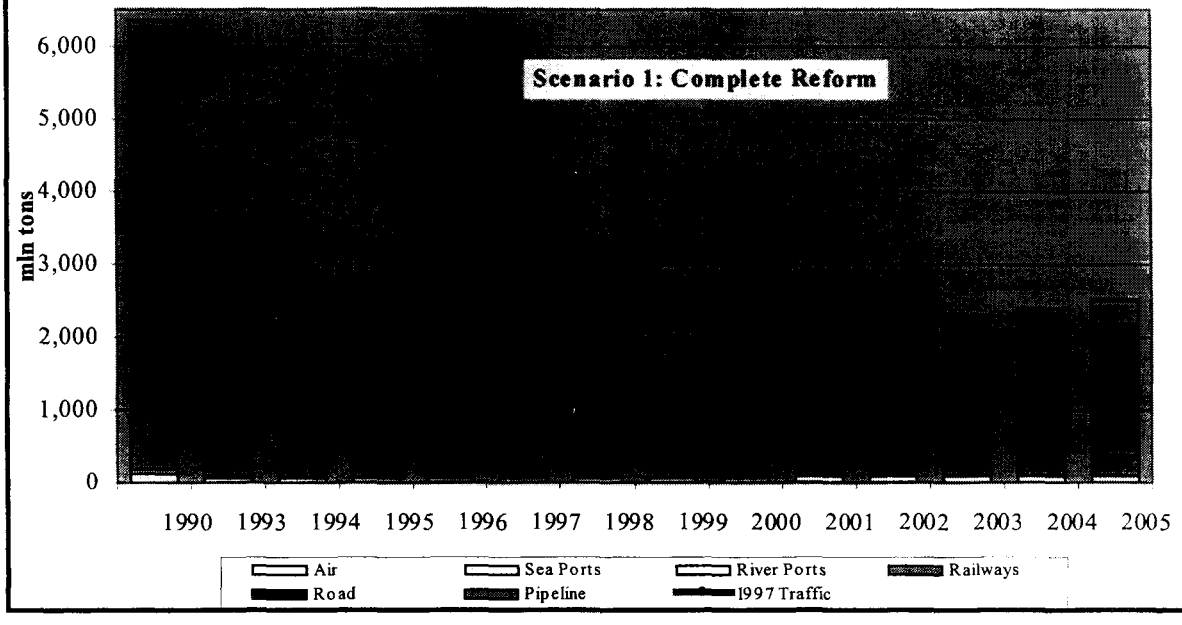
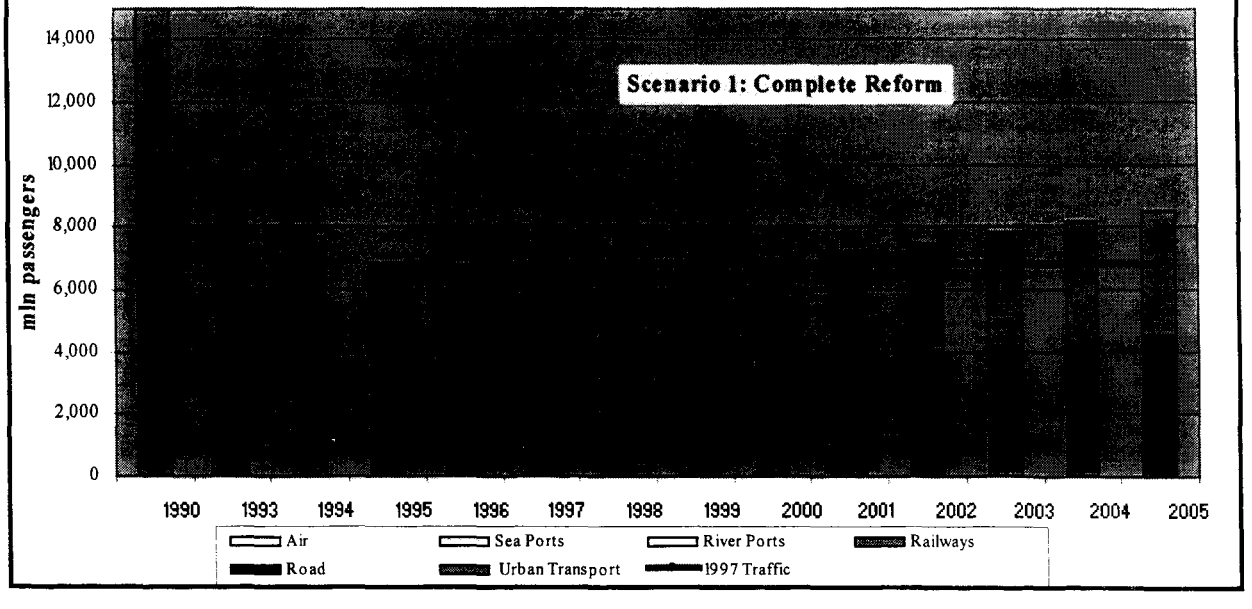


Figure 2: Traffic Actual and Forecasts, Passenger



15. **Insufficient Maintenance.** Little maintenance (even basic routine maintenance) is being done. The impression received is that the transport system is "existing on its capital stock". The asset base is eroding and may, within the next five years, deteriorate to the point at which maintenance and rehabilitation are no longer possible. If this occurs, the only option will be costly and complete reconstruction. The effects of this deterioration of the transport system will be felt by those economic sectors relying upon it.

16. **Decision Mechanisms.** Most of the sector still operates under the organizational and policy structures of earlier days. Pervasive in the sector is the absence of meaningful cost recovery and resource mobilization, with the inevitable consequence of under-funded operating entities, poor service and a degradation of infrastructure and equipment. An information base seems to exist, as transport statistics are being collected regularly. The Ministry of Transport has some of the necessary tools to modify and improve its focus on the policy making level. However, there is an apparent lack or difficulty of communication between and across authorities.

17. **Need for Change.** The sector needs to move further towards privatization and much greater use of market mechanisms than previously. The current low level of economic activity provides a convenient window in which to effect the institutional changes necessary. The time available before the transport sector becomes a bottleneck to sustained economic growth may be limited, and the sector may need to be restructured and market-oriented to be able to perform under increasing traffic volumes. Sector officials are beginning to accept the logic and the inevitability of the changes that will be needed. They also realize the extent to which their roles and responsibilities will be altered (see Section E).

18. *There is only one choice to improve efficiency, which is to operate commercially across transport modes. In addition, the Government of Ukraine does not have the resources to operate the transport sector on a public sector basis. The size of the Government is likely to remain limited and this, in turn, implies that regulatory controls and ownership would be relinquished. At an initial stage, the process of privatizing the sector could be vested in ministries implementing the economic reform program.*

C. THE REFORMED TRANSPORT SECTOR - A VISION

19. The future of the transport sector of Ukraine rests on the privatization of almost all transport services. Public sector provision of infrastructure such as roads, airports and navigation aids for air, sea-borne and river transport would take place on the basis of full cost recovery. The transformation that would take place in the transport sector would respond to the changing role of the State, the opening of the economy and the recovery of economic activity. The number of operators, clients and, more generally, decision-makers will grow. Initial beneficiaries of the opening and expansion of the sector will be its users, operators, and commerce and financial intermediaries.

20. The transport sector would, on this basis, become an incubator of increased entrepreneurial activity. Small enterprises would be launched, and significant amounts of labor would be absorbed. The main areas of expansion are going to be in trucking and bus transport, freight forwarding, regional aviation and, to a lesser extent, railways. Recurrent maintenance and rehabilitation would represent a new market for the local construction industry. This activity, as the beneficiary of the

application of cost recovery flows, would not be directly dependent on the central Government budget.

21. The successful commercial operation of the sector calls for a financial framework suitable to sustain operations in a market economy and mobilize resources (Chapter 3 of Technical Report). The allocation of private investment resources would take place within this framework. The allocation of public investments, being a part of public expenditure, would require different mechanisms.

22. **Financial Framework.** An acceptable financial framework for the transport sector would be compatible with the goal of privatizing services and achieving a net current revenue position for the sector as a whole. The transport sector would then be able to expand in concert with the economy, and would cease being a drain on scarce public resources. Key aspects of this acceptable financial framework, some of which are already in place, are the following:

I. General Aspects (already partially in place)

a) Realistic valuation and periodic adjustments of the foreign exchange rate (the exchange rate is allowed some room for adjustment);
b) Reduction and uniformity of custom duties (partially accomplished);
c) Elimination of foreign exchange controls and freedom to buy (and sell) foreign exchange from the banking system at the prevailing commercial rate (to be accomplished);
d) Liberalization of commercial banking (adequate licensing and supervision exist); and
e) Managerial freedom to purchase necessary equipment, software and technical assistance, subject only to the financial constraints of a market economy (in place);

II. Transport Specific Aspects (still to be accomplished)

a) Elimination of cross-subsidies;
b) Freedom to set levels of service, and select routes and frequencies of service;
c) Liberalization of prices;
d) Unrestricted entry for private investors into the transport markets; and
e) Recovery of the cost of public infrastructure.

23. Items II (a) through II (e) are intimately related to the generation of market based transport operations and are the focus of this review.

24. **Resource Allocation Mechanisms.** *Private Investments.* For private investments, market forces, prices, costs and access to commercial credit will influence the flow of resources to the transport sub-sectors of Ukraine. The total "allocation" of private investment would follow the pace of de-regulation, liberalization and privatization of the economy. The stronger the pace of change, the stronger the response from the private sector. In the end, there is little for policy makers to do to assign private sector flows because the price system, once liberalized, becomes the allocation mechanism. Each private activity in the sector will have a return resulting from the difference between the cost of production and the prices charged for the output. If prices are not fixed and there is no interference with what can be produced or who can produce it, the supply of goods and services will tend to grow and attract investment until all unsatisfied demand has been met.

25. *Public Investments.* The case of direct government expenditure or public debt guarantees is different. A choice amongst sectors is required first, followed by an allocation to possible uses within that sector. This requires a thorough evaluation of all possible uses for these resources compared to their benefits. It is necessary to determine the social and economic returns for each option, followed by a descending ranking according to the contribution of each to development. The cut-off rate (i.e., the rate of return below which projects will become ineligible for Government support), will be given by the level of resources available. It is the positive rate of return of the last project that can be financed prior to exhausting the resources available. Only projects showing a return in excess of the cut-off rate of return would become candidates for direct government investment or benefit from debt guarantees.

D. HOW TO GET THERE ? A STRATEGY FOR CHANGE

26. The strategy for recovery in the transport sector includes the following elements:

- Privatization of transportation services.
- Deregulation and price liberalization.
- Cost recovery on public investments to ensure financial sustainability.
- Removal of bottlenecks for an immediate development response.

The Private Sector Role - Actions on Privatization

27. In Ukraine, services that can be provided by one or a small group of individuals have partially been transferred to the private sector (both operating and ownership rights). This would also affect large and small buses, taxis, local trucks, related auxiliary services, and maintenance in the road and rail sectors. Services that are relatively easy to provide and do not require large capital sums, sophisticated technology, including specialized transport services (e.g., for schoolchildren, tourists, personnel, valuables, mail, etc.) and providing auxiliary services (e.g., airline caterers or cleaning/maintenance/repair firms), show active participation by the private sector.

28. Subsequent phases would focus on enterprises and/or services that utilize advanced technology and require heavy investment, and whose promoters must have the financial capacity to cover both. In this group would be companies that: provide stevedoring and cargo-handling services at airports and ports; offer locomotive and aircraft maintenance and repair services; hold concessions to provide rail services; and own (or hold shares in) airlines and international trucking and freight forwarding companies. Inclusion of these enterprises in the Privatization Program of the Government would need to be considered as a priority.

29. The transfer of enterprises from the State to the private sector could take place by any of the following methods, which would need to be allowed under the Privatization Program of the Government:

a) **Sale of assets.** Individual assets are sold separately to a number of small purchasers.

b) **Sale on a turnkey basis.** The enterprise is sold as a whole, with all its assets and liabilities. In this case, the sale should be by public auction, on realistic and well publicized conditions published sufficiently in advance to attract the maximum number of potential buyers. Enterprises that are not sold at or over reserve after more than one attempt can be knocked down to the highest bidder.

c) **Liquidation.** The state enterprise disappears, making way for its replacement through efforts by private entrepreneurs.

d) **Partial sales.** Where large enterprises have ancillary activities (such as inputs they provide themselves, maintenance and repair shops, vehicle fleets) these can be sold off first, leaving core activities to be sold at a later stage.

e) **Conversion into a stock company with sale of shares.** One way of selling large enterprises is first to convert them into stock companies and then to sell blocks of shares that will enable the new stockholders to familiarize themselves with the enterprise and to then participate in its management.

f) **Sale for cash or on credit.** This relates to the method of payment for the enterprise sold. In the case of enterprises where the workers' skills and expertise are important, this makes them desirable to potential buyers, sale on credit may enable the workers themselves to obtain ownership.

g) **Auctioning of supervisory or control functions.** The State would still have certain control functions in the fulfillment of its public duties. These functions themselves could be the subject of contracts with the private sector. An example is compliance with rules on pollution control. In such cases, bids would be sought from contractors to perform such control functions.

Deregulation/Regulation

30. The areas where deregulation under consideration would assist the development of the transport sector are the following:

a) **Decontrolling of prices.** Ukraine's price liberalization needs to be formalized. The alternative, i.e., the power to fix prices, entails: subsidies; support for and shoring up of inefficient industries and/or producers; shortages; black markets; and prevents prices from assisting in resource allocation (see for instance privileged passenger transport issues in par.7.38 on urban transport and par.8.16 on the railways in the main report).

b) **Opening of foreign trade.** With the price of foreign exchange set at its real value, there would not be any need to protect foreign exchange saving activities. Informal trade and smuggling would be reintegrated into the formal economy, and intensive production would be undertaken in areas of comparative advantage to be able to buy those goods that cannot be produced efficiently. Some residual informal trade might remain as an expression of evasion of customs duties and taxes (see Chapter 6 of the main report).

c) **Free access to transport activities.** A prerequisite for a free economy is the removal of barriers which prevent citizens from producing what they want. Existing regulation not being enforced would be abolished. Applications, permits, studies, demanded under cover of the argument that there has to be "order" in the activities concerned create artificial barriers and additional costs. Informal barriers to economic activities need to be systematically removed as soon as they are identified (e.g., see par. 7.26 of the main report on liberalization of the road transport industry, or par.10.12 on civil aviation and open-skies policy issues).

d) **Elimination of economic controls in the transport sector.** Another source of distortions and efficiency losses is needless controls. It can be argued that the best control known is that exercised by consumers and the checks and balances produced by competing interests (see, for instance, par.8.7 on the lack of independence of the Ukrainian Railways, in addition to issues already mentioned above relating to privileged passenger transport, deregulation of road transport or the effective opening of Ukrainian skies).

31. *The only regulations expected to remain or be developed relate to rules for competition, safety and environmental standards. This applies, for instance, to the current fuel distribution and retailing system which, although liberalized, does not operate under strictly enforced safety and environmental regulations.*

Cost Recovery of Public Investments

32. *A combination of user charges such as fuel levies, licenses and direct usage charges would be established to recover the costs of developing, maintaining and rehabilitating public investments in the sector.* This would be the case of roads, rail infrastructure, and navigation aids for air, sea and river transport. Such a system would be necessary to address significant issues currently faced by Ukraine and common to most FSU countries. They are the following: the risk of loss of valuable infrastructure and mounting rehabilitation needs; accelerating de-capitalization from maintenance backlogs; obsolete equipment; and shortage of spare parts. Roads and railway tracks, river locks, airports and ports have not been properly maintained in the last 4 years.

33. *The combined implementation of privatization, deregulation and price liberalization as well as cost recovery measures in the sector will make the financial restructuring of transport entities unavoidable. Downsizing, liquidation of unnecessary assets, divestiture of non transport assets and operations, revaluation of assets, tariff adjustments, implementation of arrears repayment and offsetting mechanisms and definition of development plans compatible with the entities' own debt capacity would need to be addressed as a matter of urgency.*

34. The financial effects of this restructuring have been evaluated to the enterprise level and are detailed in the main report[1]. This analysis has been consolidated and presented in Section G. A summary of recommended measures to achieve financial and environmental sustainability in each sub-sector, under existing macro-economic constraints, is presented in Table 2 and Annexes 1 and

[1] Details on recommended measures can be found in the main report in par.7.18 to 7.23 on road, par.7.41 to7.43 on urban transport, par.8.29 for Ukrainian Railways, par. 10.14 and 10.28 to 10.31 for air transport and airports, and par.9.18 to 9.21 on river shipping and ports, par.9.40 on seaports, par.9.51 to 9.53 on shipping.

2 of this Policy Note. The restructuring proposed is geared to obtaining cost recovery, increasing productivity, covering renewals and debt service leading to the gradual modernization of the sector. All recommended measures were elaborated in the context of projected demand and affordable manpower personnel policies. These recommendations are indicative of how sector entities could face the challenges ahead.

Removal of Bottlenecks

35. A short-term rehabilitation phase and streamlining of procedures linked to import-export could be seen as a launching platform to the implementation of the strategy. Removing transport infrastructure bottlenecks would give the leverage to bring back into use badly deteriorated or inaccessible infrastructure. *The priority would not be given to massive reconstruction or rehabilitation of complete road or rail infrastructure, but to the minimum investments required to allow traffic on main transport routes.* It would focus on roads and railways where traffic is constrained, and where the likelihood of overloads is strong once traffic starts developing. Removing trade and transport administrative bottlenecks (Chapter 6 of Technical Report) would ensure that Ukraine regains in transit competitiveness. This short-term minimal rehabilitation and administrative streamlining phase could end as soon as in 2001 when most of the economic transformation of the sector would be well underway and when a road user charge system would have been put in place.

36. Regarding overloading of vehicles, the most advisable approach under the current conditions, is to set road user charges on the premise that overloading will take place (this is already the case with Russian trucks transiting through Ukraine), and corresponding additional infrastructure costs need to be collected. The reason for this approach lies in the fact that right now axle load limits are, by and large, unenforceable, and the marginal revenue to the transporter is likely to remain higher than the marginal cost he might face. In fact, it may be in the interest of economic development that some initial overload takes place, provided that the cost of the earlier rehabilitation of the road is recovered from the commercial users[2].

E. THE PROCESS OF CHANGE

37. This section presents the numerous actions required to implement the strategy for recovery of the transport sector. These actions, listed in Table 1 & 2 and annex 2, are best summarized as four concurrent chains of events and associated processes, including: (i) change in the role of government; (ii) evolution of the legal and regulatory framework; (iii) strengthening of sector institutions; and (iv) private sector participation. If the Government launches an economic reform program for the transport sector in 1999, the restructuring of the sector could be practically completed by 2005, with further refinements and adjustments thereafter. This process is structured in phases as a matter of convenient presentation grouping specific actions according to whether they are immediate or preparatory (Phase I: 1999-2001); structural (Phase II: 2002-2003); and consolidating (Phase III: 2004-2005).

[2] Transport and Road Research Laboratory Report (Colin Ellis et al) indicated that in national economic terms, it was more beneficial to build roads capable of carrying preferred loads than weaker construction with axle load limits.

38. The gradual reform process is proposed over a period of six years. This may appear as a tight schedule. The reform process itself may be seen as the efforts necessary to realize significant yearly savings equivalent to 10 percent of the Ukrainian GDP (see Part G) and, to the extent that this is recognized, it would become a matter of national interest to actively pursue the reforms. The actual rate of implementation will reflect the degree to which a national consensus is attained.

39. The measures enumerated below are consistent with the de facto privatization, with reduction of the size of Government that is underway. However, some of the private responses observed, healthy as they may be, are technically illegal and could be reversed. Under protectionist policies, remaining Government assets go unused or used inefficiently to a significant extent, as observed in the case of road transport and railways. Because economic activity is already taking place beyond the limits established by traditional statutes, measures that regularize existing practice or facilitate it further are not likely to be resisted. Therefore, the opportunity may soon exist for swift change without major resistance to it. Accordingly, the presentation under time slices of the suggested reforms should be considered only as indicative, i.e., those structural reforms that may be ready for implementation earlier than others (e.g., in the road transport sub-sector) should go forward without delay.

40. The elements of reform for each sub-sector outlined in Table 2 fall in two categories: triggers and actions. Triggers correspond to elements of reform that could be implemented by the Government prior to any external financial support. Actions refer to reform items over a longer term, and may require external technical and financial assistance as a follow up to the Governmental decisions to reform the sector. Annex 2 outlines the major recommendations for the development of an environmentally sustainable transport sector.

41. The mission's recommendation is that, concurrent with broader economic reforms, resources should be engaged to prepare and carry out the structural reform and privatization of all transport services as presented in Tables 1 and 2.

F. PRIORITY AREAS AND EXTERNAL SUPPORT

42. External support, including the Bank's, would go to priority areas of reform and would be in support of attempts at sustaining and accelerating the process by building on progress to date. In the light of a looming financial crisis, the implementation of a reform program aiming at fiscal and macro-economic stabilization is essential. The successful implementation of fiscal reform under discussion with the IMF, would be the triggering element for World Bank active support, notably for adjustment loans in the financial, coal, agricultural, enterprise development and conceivably, the transport sector. Further adjustment support would depend on real progress under a strong structural reform in the public sector as well as in economic and social sectors. Investment operations, which are relatively isolated from the effects of current fiscal tensions, and whose benefit would likely survive an outright fiscal crisis, will continue to be processed.

G. THE EXPECTED EFFECTS OF THE POLICY REFORMS

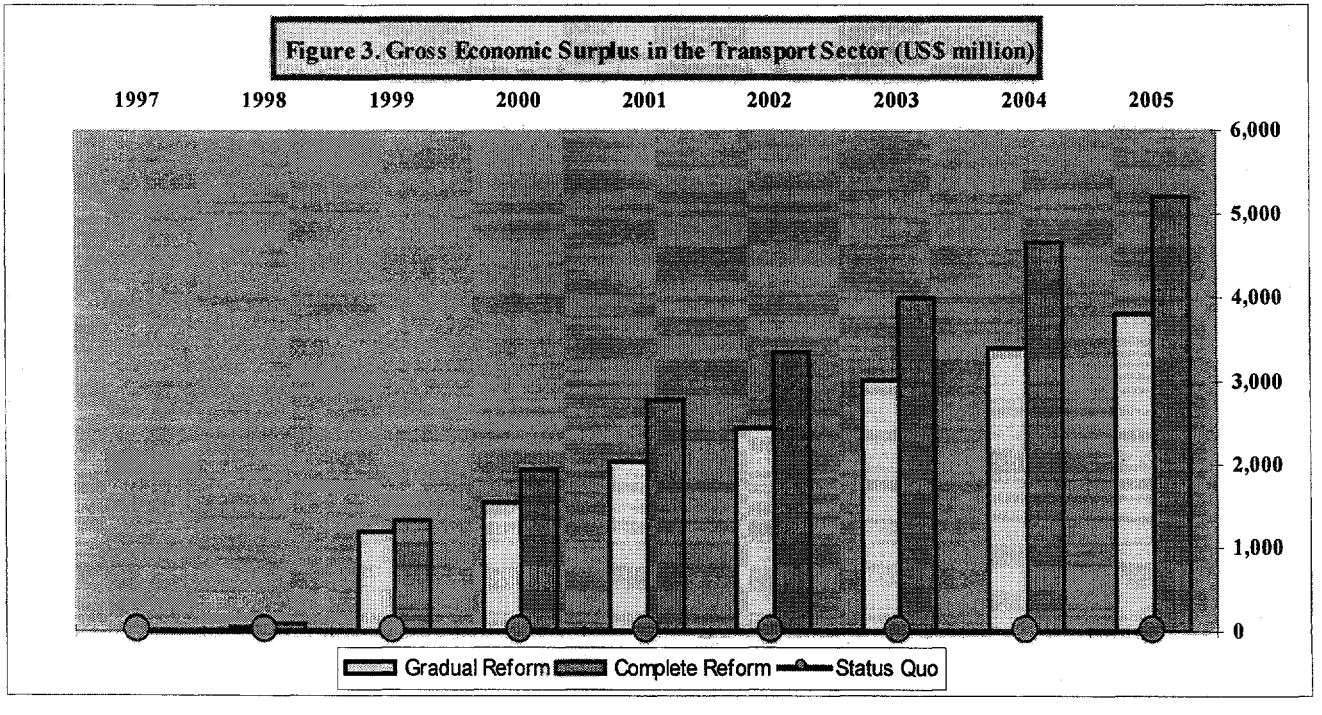
43. The implications of the recommended policy reforms on the overall financial situation of the sector are significant. Figure 3 below compares the evolution of the transport sector's gross

economic surplus[3] under three scenarios that take into account different potential developments of economic reform and growth in Ukraine.

44. The three scenarios are: (i) a prolonged *status quo* scenario basically assuming the economic and geopolitical situation of the country as well as the current slow pace of reform in the transport sector remain unchanged; (ii) a *gradual-reform* scenario assuming that, the targets of IMF and World Bank supported reforms are attained, and transport sector policy reforms as recommended in this policy note are implemented at a moderate pace; and (iii) a *complete-reform* scenario, which further assumes that sector reform takes place over the period shown in Table 1 (see Chapter 4, main report).

45. To facilitate comparisons, gross economic surplus projections assume that, for all three scenarios, each transport sub-sector is constrained by the same requirements of an adjustment program (including asset revaluation to realistic levels, adequate provisioning of depreciation and maintenance, salary increases and minimal renewals, and moderate investments to stop asset erosion and remove key transport bottlenecks) and an effective budget constraint. Sub-sector responses to these external constraints vary according to each scenario.

46. Under the *status quo* scenario, the transport sector would experience economic losses and de-capitalization amounting to more than US$5.0 billion[4] per year by 2005. Current operating losses from the public transport operators already exceed US$1.8 billion/year. By contrast, the successful implementation of the policy of reforms and transport sector adjustment as suggested in this report would generate an increase in gross economic surplus, compared to the status quo scenario, of about US$ 4 billion per year after 2005 under the *gradual-reform* scenario, and in excess of US$ 5 billion/year after 2005 under the complete-reform scenario. These surpluses would occur after renewals and moderate investments in the sector have been reestablished.



[4] Consisting in 2005 of operating losses from public operators US$2.0 billion, economic excess costs borne by trade of US$2.6 billion and US$500 million borne by the economy due to poor road safety.

47. Gross economic surplus estimates of Figure 3 do not include road operating cost savings, trade and welfare gains from trade facilitation measures, and potential gains from transit corridor development. The yearly impact of concerted and simultaneous actions affecting both the traffic and the supply side of the sector exceed 10 percent of GDP in 1997.

48. The implementation of these reforms would not have a negative impact on the Government budget. The cost of reform is imbedded in each of the sub-sector projections summarized in Fig. 3 above, which shows that economies to be realized would substantially exceed these costs. A large part of technical services required could be financed by available grants in support of governmental reform strategies from various donors, and would address the issues revealed in this transport sector review. The introduction of cost recovery measures would improve the overall financial situation of the sector and enable much larger investment capacity (Volume III, Annex 8.2.9, 9.2.9, 10.2.9) in spite of the cost of increased salaries and severance payments.

H. ASSISTANCE STRATEGY

49. The need for assistance to Ukraine's transport sector during its adjustment phase is substantial. The situation is serious, aggravated by financial imbalances and stoppage of most maintenance work. The sector has the potential and the possibility to become sustainable and able to cover its own debt service in the relatively near future.

50. There are many obstacles to overcome. The absorptive capacity is limited, and revenues limited. Technical assistance and training have an obvious role to play. As the needs to reorganize and rehabilitate the transport sector are extremely large, the priorities are to strengthen the institutional and regulatory framework for the sector and to finance the rehabilitation and maintenance of key infrastructure. It is proposed to structure the donor community's strategy with reference to triggers and actions for the transport sector[5] into:

(a) A short-term assistance strategy including:

- **Initiation of Institutional Strengthening**
- **Rehabilitation and Maintenance of the most Critical Transport Infrastructure**

(b) A medium-term strategy including:

- **Sector Institution Building**
- **Privatization or Commercialization of Sector Enterprises**
- **Cost Recovery for Transport Services and Infrastructure**
- **Rehabilitation of Key Infrastructure**

[5] See Table 2 for specific triggers and actions under this strategy.

Table 1: Proposed Program of Structural Reform and Privatization of the Transport Sector

Note: Shaded areas represent reform items already underway and being adopted under the Structural Adjustment Program

	Evolution of the government's Role	Evolution of the Legal and Regulatory Framework	Strengthening of Sector Institutions
PHASE I Immediate Actions 1999-2001	**GENERAL MEASURES** • Periodic adjustments to the foreign exchange rate, to reflect real depreciation of the local currency, and market liberalization; (l) and • Reform and simplification of custom duties. (l) • Simplification of import and export procedures (i) **TRANSPORT SECTOR MEASURES** • Formal announcement of the intent to move the sector towards a market economy; (p) • Restructuring of the Ministry of Transport (Chapter 5); (i) • Provide managers with training in transport restructuring; (i) • Public communication of a deficit elimination program in the sector, implementation of its first phase and adjustment of prices and tariffs; (i) • Preparation of bid documents for the divestiture of assets of enterprises in the sector; (i)and • Announcement and realization of studies to prepare measures under Phase II below. (p)	**GENERAL MEASURES** • Reform of taxation applicable to enterprises generally (l) • Simplification and revision of commercial legislation codes; (l) • Review and revision of legislation ruling foreign investments; (l) • Reform and review Banking legislation and liberalization of Banking services; (l) • Legislation on capital markets; (l) and • Announcement of the modifications under consideration for introduction in 2002-2003. (p) **TRANSPORT SECTOR MEASURES** • Reform of taxation applicable to sector enterprises. (l)	**GENERAL MEASURES** • Liberalization of markets for vocational training. (l) **TRANSPORT SECTOR MEASURES** • Determination of the personnel needs in downsizing the public administration related to the transport sector, (i)and • Determination of the market conditions under which qualified staff can be attracted and retained. (i)
PHASE II Structure Reform 2002-2003	**TRANSPORT SECTOR MEASURES** • Continuation of the deficit elimination program; (c) • Announcement and publication of revised bidding and procurement procedures for the State; (l) • Call to bids for divestiture of assets by State enterprises in the sector; (i) • Publication of Environmental and Safety regulations for the sector; (l) • Reduction in employment in state enterprises in the sector; (p) • Completion of liberalization of tariffs and routes; (l) and • Sale of 50% of shares of state enterprises. (i)	**GENERAL MEASURES** • Legislation on contracting, bidding and procurement by the State; (l)and • Reform and restructure custom duties (l) **TRANSPORT SECTOR MEASURES** • Revocation of State's authority to set prices (l)	**TRANSPORT SECTOR MEASURES** • Introduction of investment appraisal for all investments having either public funds or benefiting from a public guarantee; (c) • Announcement of the cut-off economic rate of return for the financial year; (c) and • All enterprises in the sector operate in competitive environment. (p)
PHASE III Consolidating Actions 2004-2005	**TRANSPORT SECTOR MEASURES** • Complete sale of share and asset divestiture in sector enterprises (i); • Completion of the deficit elimination program (c); • Publication or reporting obligations of sector enterprises; (p) • Reorganization of the public administration and Ministries related to the sector. (i)	**TRANSPORT SECTOR MEASURES** • Establishment of appeals mechanisms under the new legal and regulatory framework. (l)	**TRANSPORT SECTOR MEASURES** • A program of personnel development for the reorganized public administration related to the sector; (p) and • A program of technological innovation to continue the reduction of public administration of the sector. (p)

Letters in bracket define the preponderant element to address within each action : (p): policy action; (c) cost recovery action; (i) institutional decision; (l) legal action requiring parliament endorsement.

Table 2: Proposed Program of Sub-Sector Triggers and Actions

Sub-Sector	Railways (8.29)	Road Infrastructure	Air Sector (10.28 to 31)	River Shipping and Ports
Triggers	**Phase I** • Carry out an audit of UZ and regional railways operations and assets (c) • Separate on an accounting basis freight, long distance and commuter operations (p) • Define a labor rightsizing program (p) **Phase II** • Eliminate cross subsidies (c) **Phase III** • Establish total tariff freedom (l)	**Phase I** • Adopt a law on road user charges (7.18 & 7.19) (l) • Establish a Road Fund entity (7.20) (l) • Introduce international competitive bidding for periodic maintenance (7.22) (p) • Complete privatization of road construction and maintenance entities (7.22) (i)	**Phase I** • Finalize institutional framework and economic regulations (i) • Review Tax System (l) • Separate fully airports and airlines (i)	**Phase I** • Remove operational functions from MOT(l) • Open Dnieper river transport to competition (local and foreign) (9.20) (l) • Establish river port dues (9.19) (c) • Reduce port property tax rates (l) • End the railway monopoly for container terminal operation in Kiev(9.20) (l) • Privatize Ukrechput dredging fleet (9.18) • Contract out dredging (9.18) (i)
Actions	**Phase I** • Phase out all bartering transaction (p) • Rationalize railway assets (c) • Outsource ancillary activities (i) • Adjust tariffs to cost recovery levels (c) • Attract new traffic (i) • Develop better decision tools (i) • Prepare next phase (i) **Phase II** • Reorganize Core Activities and divest from ancillary activities (i) • Prepare a Corporatization/Privatization strategy for freight operations (i)- • Implement a Labor rightsizing program (i) **Phase III** • Corporatize Freight Operations (i) • Implement a Pilot Privatization (i)	**Phase I to III** • Review technical standards and construction practices (7.22) (p) • Maintain the core road network (c) • Establish a Pavement Management System (7.21) (i) • Launch a Road Safety Improvement Program (7.23) (i) • Phase out leaded gasoline/ reduce sulphur content in diesel • Introduce a vehicle inspection system • Promote investment to encourage public transport use	**Phase I** • Prepare an Airport Development Strategy (p) • Corporatize and Privatize airports by means of Concession (i) • Liberalize Cargo Handling Operations (i) • Elaborate an airline strategy for Air Ukraine based on its rightsizing (10.14) (p)	**Phase II** • Dredge the rocky river bed between Dneprodzerjinsk and Dnepropetrovsk (9.21) (c) • Modernize cargo handling equipment through leasing (9.18) (c) • Prepare and implement within the next five year a cost recovery program for river maintenance (9.18) (c)
	Seaports (par.9.40)	**Road Transport**	**Maritime Transport**	**Urban Transport**
Triggers	**Phases I & II** • Review the port legal framework (l) • Provide a social framework for restructuring (i)	**Phase I** • Ensure freedom of entry (7.28) (l) • Audit State vehicles (7.32) • Review Resolutions 1346 and 261 (7.31&7.33) (l)	**Phase I** • Change in Government intervention (9.51) (l)	**Phases I & II** • Adjust tariff to cost recovery levels (c) • Abolish the privilege fare system (l)
Actions	**Phases I to III** • Reorganize Core Activities (i) • Corporatize and Privatize Ports (i) • Reassess new Yuhzni oil terminal need (c)	**Phases I to III** • Provide driver training and information (7.34) (p) • Review Road Regulations (7.29) (l)	**Phases I & II** • Privatization of Shipping Lines (9.53) (i) • Freedom of Shipping Companies (9.52) (l)	**Phases I to III** • Facilitate private operations (7.42) (i) • Improve public operations (7.41) (i) • Replicate know how transfer (USAID project) (7.43) (i)

Letters in bracket define the preponderant element to address within each action : (p): policy action; (c) cost recovery action; (i) institutional decision; (l) legal action requiring parliament endorsement.

ANNEX 1 : CONSOLIDATED FINANCIAL ADJUSTMENT AND RESTRUCTURING PLANS

An adequate accounting and financial management framework for the transport sector has become an essential factor (Technical Report Chapter 3 and Annex 3.1). It will support the sector to: (i) achieve good management performance; (ii) deliver efficient and financially sustainable transport services; (iii) mobilize resources and sustain operations in a market economy; and (iv) introduce private investment resources in the sector. Key aspects of an acceptable accounting and financial management framework for the sector, should be, as a minimum, the following:

- **Improve Accounting and Financial Management Information Systems**
  (i) generalize Generally Accepted Accounting Principles (GAAP) or equivalent;
  (ii) improve accounting systems and standards;
  (iii) introduce audit requirements and improve auditing standards;
  (iv) adopt financial disclosure requirements in compliance with IAS;
  (v) ensure that decision-makers and managers become independent and accountable under a proper incentive framework.

- **Impose Cost Recovery of Public Infrastructure.**
- **Introduce Professional Valuation of State Assets.**
- **Define Adequate Amortization Policy.**
- **Facilitate Inter-enterprises Debt Clearing and Limit Barter Accounting Practices.**

The sub sector specific adjustments are outlined in Table 3.

Table 3. Financial Adjustment and Restructuring Plans

Actions	Railways	Road Infrastructure	Port	Airports
Assets Restructuring	Reevaluate and rightsize assets (around US$15 billion)	Rightsize assets to current demand	Reevaluate and rightsize assets of the five major port	Reevaluate and rightsize assets of the seven major airport
Tariff Adjustments	Passenger : from current 0.6 USc/pass.km to 1.2 in 2000 Freight : from current 1.0 USc/ton.km to 1.5 USc/ton.km	Increase Road User Charges to cover at least routine and periodic maintenance of the rightsized network	Free tariffs to let them become more competitive (20% reduction expected)	
Staff Reduction and Salary Increase	From 300,000 to 150,000 by 2005 Salary increased annually by 25 %.	Reduce staff number by privatizing all remaining construction and maintenance companies	Reduce staff number from 30,000 to 10,000 in 2005 Salary increased annually by 20%	Reduce staff number from 10,000 to 3,500 in 2005 Salary increased annually by 20%
Other	By 2002, (i) total abolition of barter transactions and conversion of barter assets into liquid assets;(ii) accounts payable brought down to no more than two months of expenditures while accounts receivable down to less than 90 days of billing turnover	The setting up of increased user charges will be accompanied by a new organizational set up.	Divest from all social activities	Divest from all social activities

ANNEX 2 : ENVIRONMENTAL RECOMMENDATIONS

Main recommendations pertaining to the development of an environmentally sustainable development of transport are as follows :

- **Integration of Environment in Transport Decisions. (par.11.25)**
- **Improve Fuel Quality (par.11.27)**
- **Improve Technical Control of Vehicles (par. 11.28)**
- **Facilitate river transport (par. 11.31)**
- **Encourage use of public transportation (par. 11.33)**
- **Secure the transport of dangerous goods (par. 11.34)**
- **Develop the use of Environmental Impact Assessment (par.11.35)**

Paragraph numbers refer to the Technical Report.