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Republic of Armenia
Transport Sector Review

(In Three Volumes) Volume I: Policy Note

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CURRENCY UNITS and EQUIVALENTS

Dr	Dram - Introduced Nov. 22, 1993	US$1 = 14 Dr	(November, 1993)
		US$1 = 425 Dr	(October, 1996)
Rbl	Ruble	US$1 = 2,600 Rbl	(October 1993)
US$	US Dollar		
USc	US cent		

WEIGHTS, MEASURES and OTHER UNITS

bln	billion
inh	inhabitant
kg	kilogram
km	kilometer
mln	million
pass	passenger
sq km, km^2	square kilometer
t	ton (metric, 1,000 kg)
th	thousand
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
ARD	Armenian Road Directorate
CIF	Cost-Insurance-Freight
CIS	Commonwealth of Independent States
CLAU	Caucasus Logistics Advisory Unit
CMEA	Council for Mutual Economic Assistance
COTIF	Bern Convention of May 9, 1980
EBRD	European Bank for Reconstruction and Development
ECAC	European Civil Aviation Conference
EDI	Electronic Data Interchanges
ESAF	Extended Structural Adjustment Facility
EU	European Union
FIATA	Fédération Internationale des Associations des Transitaires et Assimilés
FOB	Free-On-Board
FSU	Former Soviet Union
GATT	General Agreement on Tariffs and Trade
GDCA	General Department of Civil Aviation
GDI	Gross Domestic Investment
GDP	Gross Domestic Product
GNP	Gross National Product
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMF	International Monetary Fund
L/C	Letter of Credit
MNEP	Ministry of Nature and Environment
MOT	Ministry of Transport
NEAP	National Environmental Action Plan
OECD	Organization for Economic Cooperation and Development
PIP	Public Investment Plan
SAC	Structural Adjustment Credit
SEPA	State Enterprise of Special Assignment
SGS	FSU Railway Association
SMGS	USSR Rail Waybill
SOE	State Organizations and Enterprises
STF	Systemic Transformation Facility
SZD	FSU's Soviet Union Railways
TACIS	Technical Assistance for Commonwealth of Independent States
TIR	International Road Transport
VAT	Value Added Tax
WTO	World Trade Organization

REPUBLIC OF ARMENIA

TRANSPORT SECTOR REVIEW

POLICY NOTE

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ACKNOWLEDGEMENTS

The Review is based on findings of a World Bank mission which visited Armenia in October, 1996. The members of the mission were P. N. Taborga (mission leader); Anders Bonde (Highway Specialist); Alexis Bonnel (Financial Analyst); Jean-Paul Desgranges (Aviation Specialist); Parbo Juchnewitsch (Railway Reform Specialist); Paul van der Lande (Environmentalist); Rene Meews (Containerization Specialist); Cyril Muller (Regional Issues); Robert Nooter (Transport Economist) and Ovadia Salama (Transport and Trade Facilitation).

M. Henry Kochinian, Minister of Transport, was the main counterpart of the mission on the Armenian 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 the Armenia Structural Adjustment Credit operation, on-going World Bank and IMF work on the macro-economic conditions of the country, other sector work, studies supported by EBRD, EU and UN-WFP, and findings from various World Bank missions.

REPUBLIC OF ARMENIA
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 Armenia'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 Armenia in June and October, 1996. It shows: (a) the extreme seriousness of the situation in the transport sector, and the need to stabilize and resolve internal resource mobilization and allocation issues with macro-economic stabilization; (b) the need to continue developing the macro-economic policy framework and stimulate growth of the private economy, albeit under serious constraints; and (c) transport flows that reflect the contraction of trade and economic activity in Armenia, the effect of border closings and economic prospects in the Caucasus region.

The Economy

2. **Recent Economic Performance.** The effect of the breakdown of trade, payments and financial system of the former Soviet Union on the Armenian economy was compounded by the Nagorno-Karabakh conflict and the blockade of Armenian borders with Turkey and Azerbaijan that followed. Between 1991 and 1993, GDP dropped by approximately 60 percent. At the same time, large financial imbalances and massive budget deficits led to runaway inflation, which in the last two months of 1993 alone reached 900 percent. Since 1994, the macro-economic situation has improved markedly. Following the introduction of a national currency in November 1993, the authorities tightened financial policies. Public expenditures were limited to priority items and central bank financing of the fiscal deficit was curtailed. Inflation has since fallen sharply. In the first 9 months of 1996, cumulative monthly inflation totaled only 3 percent. Low inflation has been accompanied by broad stability in the nominal exchange rate, which has enhanced confidence in the new currency. After the huge decline in GDP during 1991-93, growth of 5.4 and 6.7 percent were recorded in 1994 and 1995 respectively. Preliminary estimates suggest that GDP grew by 6.3% in 1996. Investment is beginning to revive from near-zero levels, while export growth in value terms in 1995 reached 27 percent.

3. **Reform Program and External Support.** The reform process in Armenia started just after independence, with the privatization of 87 percent of agricultural land and of more than 350 small-scale enterprises. The reform momentum was subsequently somewhat dissipated in the day-to-day management of a siege economy. However, with the easing of regional tensions, following the cease-fire agreement with Azerbaijan in 1994, the implementation of reforms accelerated again. The 1995 reform program was supported by the IMF (STF approved in December 1994, SBA approved in June 1995) and the World Bank (IDA Rehabilitation Credit approved in February 1995). Under the 1995 program, the country liberalized prices, opened the trade regime, reduced energy subsidies, made progress on privatization, and improved the targeting of social expenditures.

4. The 1996 program (supported by an IMF ESAF and a World Bank - IDA Structural Adjustment Credit) has focused on deepening the process of structural reforms. The Government has initiated reforms in public administration by undertaking measures to restore public sector pay, rationalize the structure of government and limit budget-financed employment. It is also in the process of reforming the health and education sectors with a view to increase cost-recovery and private sector participation. At the same time, the Government has taken actions to increase financial discipline by eliminating clearing trade with Turkmenistan, restructuring the energy sector and increasing collection rates, and reforming and consolidating the financial sector. Financial discipline is also being strengthened by the acceleration of privatization: over 3,400 small-scale and 900 medium and large enterprises have been privatized to date.

5. **Medium-Term Outlook.** If current trends continue, the outlook for Armenia's economy is promising. Output is projected to continue to grow as the reform program deepens and as regional tensions ease (which would remove constraints on external trade, sharply decrease transport and energy costs and enhance access to external financing). In the early years of the reform program, high levels of GDP growth would result primarily from higher capacity utilization (currently estimated at about 30 percent) and rapid private sector development. Growth is expected to be led by export demand both in FSU markets, as those economies recover, and by increasing penetration of non-traditional markets, such as the Middle East and Europe. The expansion and diversification of exports would be stimulated by the improvement in the incentives framework induced by the reform program. In particular, average productivity is expected to increase substantially as the role of the private sector is enlarged and as greater financial discipline is imposed, especially in the public sector. Infrastructure investments designed to overcome Armenia's poor transport and communications connections with neighboring countries would significantly facilitate growth in external trade.

Major Transport Sector Issues

6. 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 the West with Turkey, when 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.** Current growth trends are not sustainable without a reopening of borders and expansion of trade. Continuing contraction of the Russian economy and disruption of trade are the main reasons for this 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.

9. **Agenda for change.** The program of reforms now under way emanate 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, 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 of behavior of economic agents 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, e.g., radio frequencies, urban rights of way.

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-à-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; and (iii) improving public sector management and performance. *All of these steps are under way*

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 should act by omission as is already happening. If it is absent from the scene, the private sector can take shape, grow and develop. Active State presence will tend to inhibit, weaken and, in most cases, prevent the private sector from functioning as it should.

B. THE TRANSPORT SECTOR

14. 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 1995, while freight volumes in 1995 were at less than 10 percent of 1990 levels. Even under a scenario of reopening of borders, significant traffic recovery in the short to medium term is not likely (see Figures 1 and 2 below).

15. Little, if any, maintenance (even basic routine maintenance) outside a World Bank - IDA financed project is being done. The impression 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. Worsening the picture, the conflict with Azerbaijan has resulted in severely damaged road and railway infrastructure: several bridges were blown-up on the critical link between Yerevan and Tbilisi, electric cables were stolen and the signalization system vandalized. The effects of this deterioration of the transport system will be felt by other economic sectors that rely upon it.

16. 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 unfunded operating entities, poor service and a degradation of infrastructure and equipment. There exists a reliable and consistent information base, as transport statistics are being collected regularly. The Ministry of Transport has the necessary tools to modify and improve its sectoral focus and concentrate efforts at the policy making level.

17. 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. Many 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).

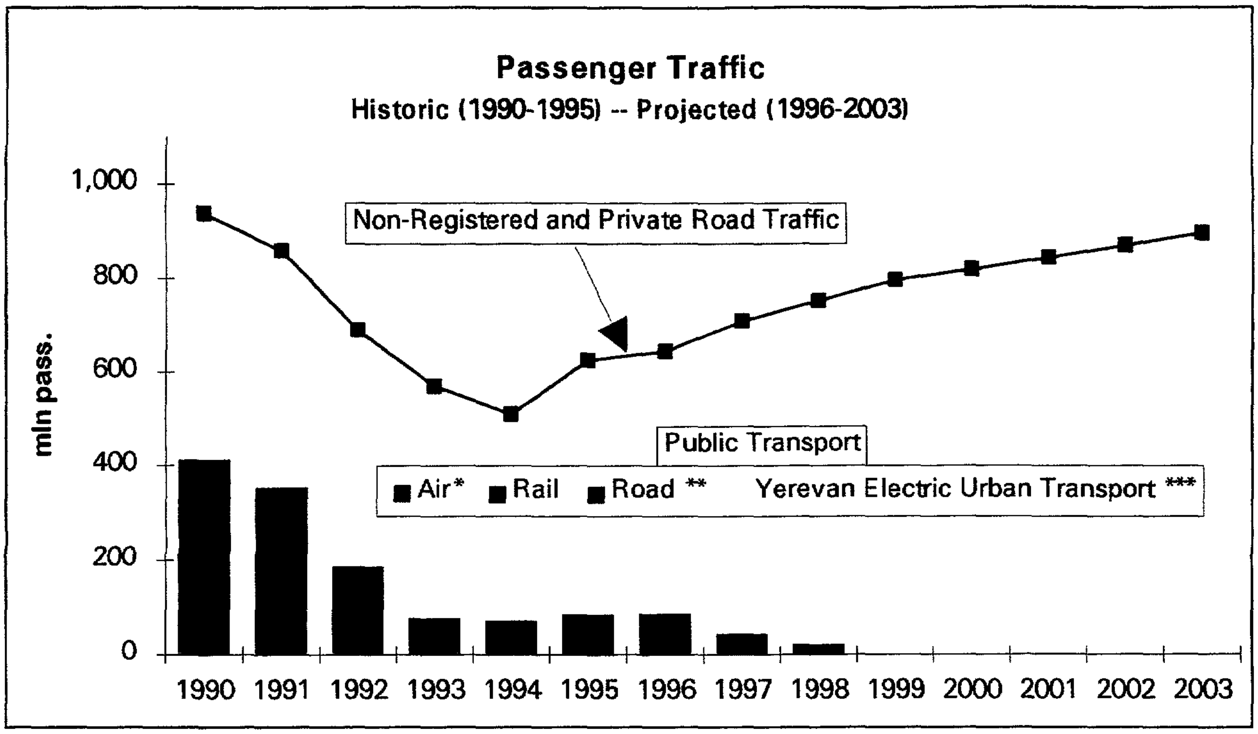

Figure 1

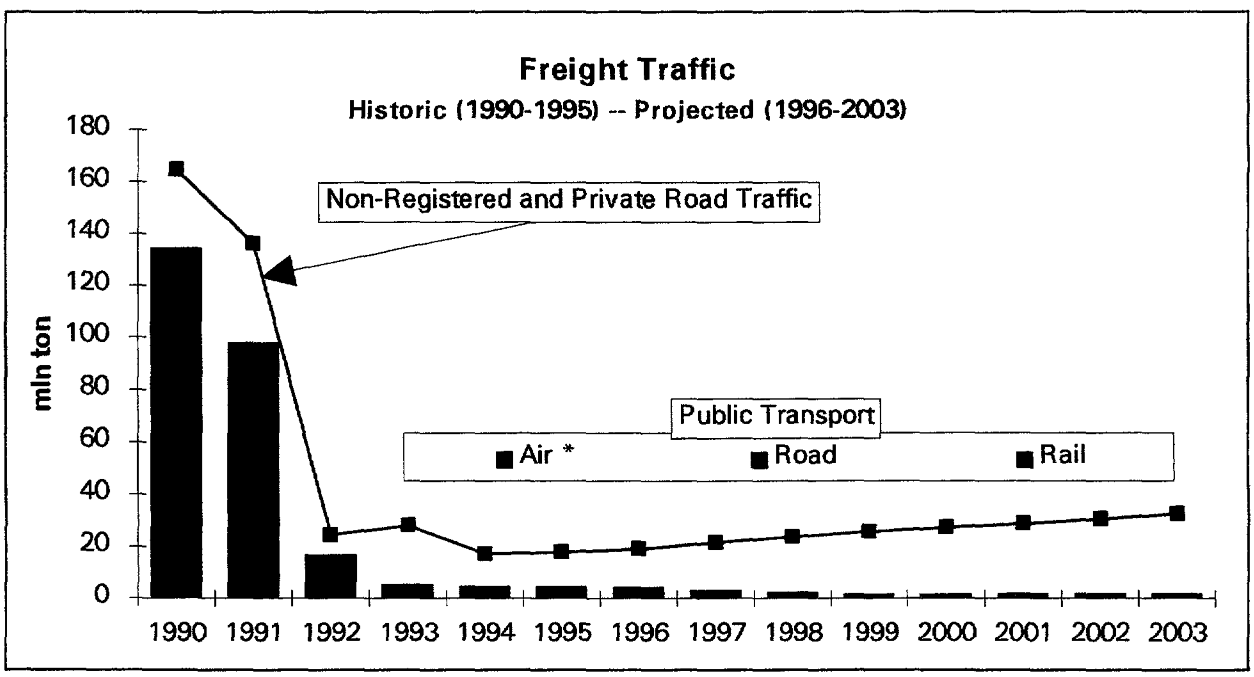

Figure 2

Notes: * departing traffic, all airports
** includes international, interurban, suburban and urban bus, microbus and taxi transport
*** subway, tramway and trolleybus traffic for the city of Yerevan

18. *There is only one choice to improve efficiency, which is to operate commercially across transport modes. In addition, the Government of Armenia 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 transport sector of Armenia must rest on the privatization of almost all transport services. Public sector provision of infrastructure such as roads, airports and navigation aids for air 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 intermediators.

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. The allocation of private investment resources would take place within this framework. The allocation of public investments, being a part of the 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:

<u>I. General Aspects</u> (already in place)

a) Realistic valuation and periodic adjustments of the foreign exchange rate (the exchange rate is already allowed to float);
b) Reduction and uniformity of custom duties (low and uniform duties are in place);
c) Elimination of foreign exchange controls and freedom to buy (and sell) foreign exchange from the banking system at the prevailing commercial rate (current account transactions are already fully convertible);
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 State 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.

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

23. **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 Armenia. Global "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.

24. *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 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 will become candidates for direct government investment or benefit from debt guarantees.

D. HOW TO GET THERE - A STRATEGY FOR CHANGE

25. 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

26. Initially, services that can be provided by one or a small group of individuals should be transferred first to the private sector (both operating and ownership rights). This would affect large and small buses, taxis, local trucks, related auxiliary services, and maintenance in the road and rail sectors.

27. Services that are relatively easy to provide and do not require large capital sums, sophisticated technology, or major investments should follow. This would include specialized transport services (e.g., for schoolchildren, tourists, personnel, valuables, mail, etc.) and those of a certain size providing auxiliary services (e.g., airline caterers or cleaning/maintenance/repair firms).

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; 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 basic 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, and 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.** Armenia'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 paras. 5.50 and 5.51 on road transport and 6.35 to 6.37 on the railways, or paras. 7.45 and 7.46 on Armenian Airlines' tariffs, 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 IV 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 paras. 5.65 to 5.69 of the main report on liberalization of the road transport industry, or paras. 7.8 and 7.9 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, para. 6.58 on the level of independence of the Armenian Railways, in addition to issues already mentioned above relating to privileged passenger transport, deregulation of road transport or the effective opening of Armenian skies).

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

31. *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, railroad trackage, and navigation aids for air transport. Such a system would be necessary to address significant issues currently faced by Armenia 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. Armenian roads and railway tracks have not been properly maintained in the last 4 years (the only exception being the road sections repaired under the Highway Project financed by the World Bank).

32. *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.* The financial effects of this restructuring have been evaluated to the enterprise level and are detailed in the main report[1]. The analysis has been consolidated and presented in Section G. A summary of recommended measures to achieve sustainability in each sub-sector, under existing macro-economic constraints, is presented in Annex 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 man power personnel policies. These recommendations are indicative of how sector entities could face the challenges ahead.

[1] Details on recommended measures can be found in the main report in paras. 5.64 to 5.72 for road and urban transport, paras. 6.68 to 6.72 for Armenian Railways, paras. 7.51 to 7.56 for Armenian Airlines, and paras. 7.65 to 7.67 for Zvartnots Airport. In addition, paras. 5.39 to 5.43 relate to the actions needed to expand the level of financing available for the maintenance of the road network.

Removal of Bottlenecks

33. A short term minimal rehabilitation phase could be seen as a launching platform to the implementation of the strategy. Removing transport bottlenecks would give the leverage to bring back into use unusable 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. This would be done independently of whether a full cost recovery system for public investments is operational.* It would focus on roads and railways where traffic is constrained, and where the likelihood of overloads is strong once traffic starts developing. This short-term minimal rehabilitation phase could end as soon as in 1998, 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.

34. 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 Iranian Imports, Russian trucks transiting through Georgia, and may also happen as the Turkish border reopens), 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.

E. THE PROCESS OF CHANGE

35. This section presents the numerous actions required to implement the strategy for recovery of the transport sector. These actions, listed in Table 1 attached, 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 1997, the restructuring of the sector could be practically completed by 2000, 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 (1997-1998); structural (1998-2000); and consolidating (2000-2002).

36. 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, while Government assets go unused or used inefficiently to a significant extent, as observed in the case of road transport. 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 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.

37. *The World Bank'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 Table 1.*

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	Stregthening of Sector Institutions	Private Sector Participation
PHASE I **Immediate Actions** **1997-1998**	**GENERAL MEASURES** • Periodic adjustments to the foreign exchange rate, to reflect real depreciation of the local currency, and market liberalization, and • Reform and simplification of custom duties. • Simplification of import and export procedures **TRANSPORT SECTOR MEASURES** • Formal announcement of the intent to move the sector towards a market economy; • Public communication of a deficit elimination program in the sector, implementation of its first phase and adjustment of prices and tariffs; • Preparation of bid documents for the divestiture of assets of enterprises in the sector; and • Announcement and realization of studies to prepare measures under Phase II below	**GENERAL MEASURES** • Reform of taxation applicable to enterprises generally • Simplification and revision of commercial legislation codes, • Review and revision of legislation ruling foreign investments, • Reform and review Banking legislation and liberalization of Banking services; • Legislation on capital markets, and • Announcement of the modifications under consideration for introduction in 1999-2000 **TRANSPORT SECTOR MEASURES** • Reform of taxation applicable to sector enterprises,	**GENERAL MEASURES** • Liberalization of markets for vocational training. **TRANSPORT SECTOR MEASURES** • Determination of the personnel needs in downsizing the public administration related to the transport sector, and • Determination of the market conditions under which qualified staff can be attracted and retained	**GENERAL MEASURES** • Reduction of Custom duties; • Simplification of applicable taxation; and • Measures to expand the availability of financial services. **TRANSPORT SECTOR MEASURES** • Further expansion of private participation in ownership of transport enterprises and elimination of State monopolies, • Initiation of deregulation of routes and levels of services, and • Monitored liberalization of prices
PHASE II **Structural Reforms** **1999-2000**	**TRANSPORT SECTOR MEASURES** • Continuation of the deficit elimination program, • Announcement and publication of revised bidding and procurement procedures for the State, • Call to bids for divestiture of assets by State enterprises in the sector, • Publication of Environmental and Safety regulations for the sector, • Reduction in employment in state enterprises in the sector, • Completion of liberalization of tariffs and routes; and • Sale of 50% of shares of state enterprises.	**GENERAL MEASURES** • Legislation on contracting, bidding and procurement by the State, and • Reform and restructure custom duties **TRANSPORT SECTOR MEASURES** • Revocation of the State's authority to set prices	**TRANSPORT SECTOR MEASURES** • Introduction of investment appraisal for all investments having either public funds or benefitting from a public guarantee, • Announcement of the cut-off economic rate of return for the financial year, and • All enterprises in the sector operate in a competitive environment	**TRANSPORT SECTOR MEASURES** • Continuation of Phase I actions to cover remaining sub-sectors and services
PHASE III **Consolidating Actions** **2000-2002**	**TRANSPORT SECTOR MEASURES** • Complete sale of shares and asset divestiture in sector enterprises, • Completion of the deficit elimination program, • Publication of reporting obligations of sector enterprises; and • Reorganization of the public administration and Ministries related to the sector.	**TRANSPORT SECTOR MEASURES** • Establishment of appeals mechanisms under the new legal and regulatory framework	**TRANSPORT SECTOR MEASURES** • A program of personnel development for the reorganized public administration related to the sector, and • A program of technological innovation to continue the reduction of the public administration of the sector	**TRANSPORT SECTOR MEASURES** • Completion of substitution of the State by the private sector in transport enterprises, and • Investment levels in transport by the private sector in response to demand under market determined prices and subject to financial constraints

F. PRIORITY AREAS and KEY SUB-SECTOR RECOMMENDATIONS

38. In a scenario of continued economic reform and easing of regional tensions, key recommendations for each transport sub-sector are presented below. The priority areas for reform are in road infrastructure, road transport services (both passengers and freight), and the railways. These priorities correspond to areas of concentration, *if* exclusive choices were to be faced by the decision makers responsible for the economic reforms. Such choices could be the result of lack of resources, institutional capacity, actual delays in launching preparation work or similar difficulties. True as this may be, the assignment of priorities is not an advocacy for postponing action on trade facilitation or aviation, nor does it give these activities a status of exception from the adjustment process.

39. **Road Infrastructure** managed by the Armenian Road Directorate (ARD) of the Ministry of Transport is of particular importance to the support of local production and distribution, and to trade. The Government and ARD would continue the transformation process it has already launched by considering actions along the following lines as being in the best interests of the economy and the population:

- *Cost Recovery Measures.* The resources available to the upkeep of the road network need to be brought more in line with current needs by means of a combination of cost recovery measures that generate resources from road users (see paras. 5.24 and 5.39 to 5.43 in the main report);

- *Project Selection.* Measures should be further developed to reduce the cost of maintaining the road network by; (i) the systematic use of economic analysis as a basis for selecting the most appropriate time and kind of road maintenance; (ii) the use of improved road technology; and (iii) and timely maintenance interventions corresponding to the level of resources available (see paras. 5.44 to 5.46, main report);

- *Cost Reduction Measures.* The upkeep costs of the network should be reduced by competitive bidding procedures for periodic maintenance, the use of routine maintenance by contract combined with further privatization of the road construction and maintenance industry (which already started under the Highway Project), and the possible use of private road associations for low traffic roads (see paras. 5.44 to 5.46, main report); and

- *Monitoring Functions.* In addition to the control of civil works, specific monitoring functions concerning traffic counts and periodic road condition surveys over the network, and safety measures to minimize accidents, would be necessary (paras. 5.10 and 5.11, main report).

40. **Inter-Urban and International Road Freight and Passenger Transport**. Privatization, de-monopolization, and freeing entry to the market by both inter-urban and international transport companies is urgently needed. Inter-city and international services would be the prime candidates for privatization (see paras. 5.65 and 5.66, main report). Privatization would bring into operation the existing fleet and support the emerging private economy. The thrust for this reform is not likely

to come from the State-owned enterprises themselves. It would involve short term divestiture of State property, combined with liberalization of entry and tariffs, and the elimination of Government subsidies, direct or indirect. All operators would be on the same footing and, inter alia, any remaining distortions in fuel prices would be eliminated.

41. The Government has recognized the need for reform in the road transport sub-sector and is considering actions in favor of further privatization and liberalization, including road transport services. The Government is also considering the re-organization of all road transport departments. These would become the regulatory bodies of the sub-sector, dealing with road transport licensing as well as environmental and safety issues. The priority now is the acceleration of this privatization and liberalization process.

42. **Urban Transport**. The problems of the urban transport system in Yerevan are more complex than those of the international or inter-urban sectors, and careful study is needed before final decisions could be reached with certainty. However, as in the international and inter-urban sectors, there is a strong case to be made for privatization of much of the system as quickly as possible. A careful study should be carried out to determine if it is worth trying to preserve the electric vehicle operations (except the Metro), which are incurring substantial losses and which would require a substantial investment to renew (see paras. 5.67 to 5.69, main report).

43. **The Metro** would need to implement urgently a financial adjustment and restructuring plan. *Privileged* passenger fare exceptions should be removed and full cost recovery levels reached within the next five years. The restructuring program calls for actions on: (i) asset restructuring; (ii) tariff adjustment and rationalization; (iii) staff reduction and salary increases; (iv) a cost reduction program; and (v) an arrears repayment program (paras. 5.70 to 5.72, main report).

44. **Railways**. The Armenian Railways are important to potential foreign trade and presently represent a high cost Government monopoly. Their reorganization would include separation into an independent corporation, commercially operated and with ownership vested in the State, with optional privatization at a later stage (see paras. 6.66 to 6.72, main report). Specific railway services or functions would be candidates for privatization, and the railways allowed to compete with other modes. Railway specialization, if any, would become an outcome of successful competition and physical advantages. Today, excess railway capacity exists. The assignment of priority to the railways only reflects their potential role in international and transit traffic to and from neighboring countries with a reopening of borders. Their level of traffic and ultimate survival is related to the political and economic situation of Armenia's neighbors.

45. The Railways have initiated their restructuring by reducing personnel and concentrating on their core business. Still, these efforts need to be continued as the rate at which the railways are de-capitalizing is significant and traffic is not likely to reach historic levels in the near future. Assets and staff need further downsizing, tariffs need significant increases and the continuation of extremely unprofitable operations including passenger transport (paras. 6.36 to 6.38, main report) and some freight services on under-utilized routes should be seriously questioned. Also, given current traffic levels, the option of favoring diesel traction rather than electrical traction deserves careful examination (see paras. 6.52 and 6.65, main report).

46. **Air Transport.** Airline, airport, and traffic control operations need to be under independent management and operate on the basis of commercial principles. The policy of opening of Armenian skies to foreign airlines needs to be implemented urgently (see paras. 7.8 and 7.9, main report). Also, given current excess capacity of Armenia's airport network, an Airport National Masterplan would be necessary to define priorities and ensure consistency in terms of airport investments (para. 7.31, main report). Specific airport and airline recommendations are as follows:

Zvartnots Airport

- There is a need to separate airport and air traffic control operations (paras. 7.16 and 7.17, main report)
- Financial restructuring of the airport is necessary (paras. 7.65 to 7.67, main report).
- The airport will need to increase its revenues by adopting a marketing strategy to increase utilization of its freight terminal under construction (para. 7.34, main report).
- A program to reduce unnecessary delays to passengers should be implemented (para. 7.32, main report).

Armenian Airlines

- The airline needs to adjust its work force and continue its cost reduction and tariff increase efforts through the implementation of a financial restructuring plan (paras. 7.49 to 7.58, main report).
- Exploration of mechanisms to provide guarantees to make fleet modernization possible is a high priority (paras. 7.27 and 7.28, main report).

47. **Transport and Trade Facilitation.** For economic revival to be sustained and accompanied by growth in new sectors, measures to expand and facilitate trade are necessary. Main transport and trade facilitation recommendations are as follows:

- *Participation in Trade and Transport Related International Conventions* (paras. 4.7 and following, main report). Given its extreme shortage of financial resources, Armenia's participation in International Conventions must be planned with the utmost parsimony, after establishing that the quantitative advantages of such participation unequivocally outweigh the initial and recurring costs. It is recommended that an independent study be conducted for a number of Conventions of potential interest to Armenia. The study would identify prospective members, develop marketing and business plans, conduct cash-flow and benefit-cost analyses, determine the relative usefulness, urgency and viability of each of these Conventions, rank their priorities and establish realistic time-tables for their acceptance (see paras. 4.15 to 4.18, main report).

- *Customs Procedures* (paras. 4.29 and following, main report). Armenia has achieved considerable progress in its customs procedures by the adoption and operation of the ASYCUDA computerized customs data system. However, it is falling behind in terms of building construction and site layout for its numerous customs points and regional customs houses, none of which were required under the Soviet regime. Working conditions in the presently existing facilities are extremely severe, even though customs collections significantly and regularly contribute to the Government budget. It is recommended that custom houses, warehouses and weigh-machines be built in all regional customs points. Cost recovery of this project can be achieved through improved customs operations and facilitation of VAT collections (see paras. 4.37 to 4.40, main report).

- *International Insurance* (paras. 4.19 and following, main report). International insurance is a major bottleneck to trade and transport in Armenia. There is no credible insurance system that can be used for cars, trucks or cargo. Basic insurance legislation is lacking, and contractual legal obligations are commonly breached. The Armenian market is small and risks are spread only with great difficulty. Appropriate legislation for the insurance sector would need to be enacted. Such legislation would enable a free, non-monopolistic insurance market. Technical assistance aimed at achieving this goal is necessary and urgent (see para. 4.21, main report).

- *Freight forwarding* (paras. 4.53 and following, main report). Freight forwarding does not exist as a profession in Armenia for shipments bound beyond its borders. Only a few shipping companies partially fulfill this function for their large or foreign clients. It is recommended that a technical assistance project be undertaken aimed at promoting the development and growth of a freight forwarding profession by setting up an independent professional association, which will apply international practices aimed at protecting the owner of the merchandise shipped under the operator's complete responsibility (see paras. 4.62 to 4.74, main report).

G. THE EXPECTED EFFECTS OF THE POLICY REFORMS

48. The implications of the recommended policy reforms on the overall financial situation (See Annex 2) of the sector are significant. Figure 3 below compares the evolution of the transport sector's gross public surplus[2] under three scenarios that take into account different potential developments of economic reform and growth as well as geopolitical stability in Armenia.

49. 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 *border-opening* scenario assuming that the border with Turkey reopens, the targets of IMF and World Bank supported reforms are attained, and transport sector policy reforms as recommended in this policy note are implemented; and (iii) a *peace in Transcaucasia* scenario, which further assumes that over a relatively short period of time, all regional tensions substantially ease, leading to the opening of all trade and transportation routes between Armenia and its neighboring countries (see Chapter III, main report).

[2] Defined as the sum of projected gross profits, under each scenario, of all the transport sub-sectors which are likely to remain State-owned in the short-term (Armenian railways, Armenian Airlines, Zvartnots airport and the Metro of Yerevan). Trucking and bus transport would be operated by the private sector. The impact of road infrastructure cash-flows in the sector's gross public surplus is treated separately in para. 52.

50. To facilitate comparisons, gross public 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.

51. Under the *status quo* scenario, the transport sector would experience losses and de-capitalization amounting to more than US$50 million per year by 2003. Current losses already exceed US$15 million/year. By contrast, the successful implementation of the policy of reforms and transport sector adjustment as suggested in this report would generate a gross public surplus of about US$5 million per year after 2000 under the *border-opening* scenario, and in excess of US$15 million/year after 2000 under the *peace in Transcaucasia* scenario. These surpluses would occur after renewals and moderate investments in the sector have been reestablished.

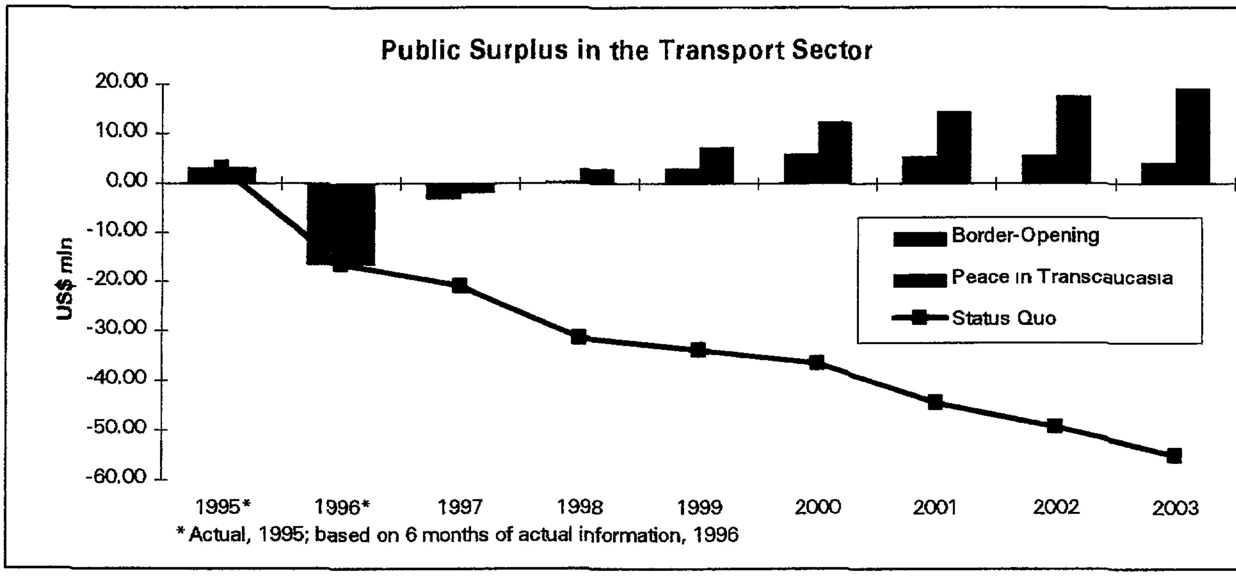

Figure 3

52. Gross public surplus estimates shown in Figure 3 do not include road infrastructure cash-flows. The Armenian Road Directorate (ARD) estimates that the road infrastructure funding requirements for maintenance are about US$45 million/year, after the deferred maintenance backlog of about US$ 100 million has been eliminated. The Government currently is considering the possibility of implementing a new road user charge system based on a fuel surtax, with the intention that related revenues would be used for road maintenance. This measure would generate an estimated US$5 to 7 million per year, depending on the scenario taken. Limited State budget allocations for road infrastructure works and proceeds from the World Bank Highway Project credit would be additional sources of funds. If the road user charge proposal is indeed implemented, the financial shortfall of the sub-sector would exceed US$55 million/year on average over the next seven years, under the optimistic *peace in Transcaucasia* scenario. A major revision of the road user charge system so as to include additional road user charges (like transit and axle load charges

as well as vehicle registration fees), whose proceeds would be allocated to road maintenance and rehabilitation, is urgently needed to confront the erosion of Armenia's road network. At the same time, an adjustment of ARD's work program to bring it into balance with available resources will be necessary.

H. ASSISTANCE STRATEGY

53. The need for assistance to Armenia's transport sector is substantial. The situation is serious, aggravated by financial imbalances and stoppage of most maintenance work. For example, were it not the technical assistance[3], other grant support from bilateral donors to the railways[4], the Highway Project and support from Himladram (All Armenia Fund), emergency assistance to Armenia would have not reached its destination and some main roads would not have been able to remain operational.

54. There are many obstacles to overcome. The absorptive capacity is limited, debt capacities small and revenues limited. Technical assistance and training, so far accepted and welcomed by the Government, have an obvious role to play. However, the continuation of current technical assistance and direct operational support to maintain the flow of humanitarian aid to both Georgia and Armenia is scheduled to end in 1997 and a more comprehensive approach to the sector is necessary.

55. 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 for the transport sector[5] into:

(a) A medium-term strategy including:

- **Sector Institution Building**

  The sector institutions that would be assisted range from the ministries formulating the sector's reform program to sub-sector entities such as Armenian Railways, the Armenian Road Directorate and the Civil Aviation Department. The assistance would cover: legal frameworks; attributions and functions of the sector institutions in a market economy; restructuring of public enterprises in the sector to enable their independent operation in a competitive environment and prepare their privatization; liberalization of transport and of freight forwarding markets; and privatization of road freight and passenger transport.

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3 Technical assistance to the transport sector notably includes assistance from EU comprising support to the Highway Project, advise and management training for the Armenian Railways, a feasibility study addressing water infiltration problems in the Metro of Yerevan, and studies financed by the EU-TRACECA Program.

4 Mainly through the UN-World Food Program (WFP) and its Caucasus Logistics Advisory Unit (CLAU).

5 See Annex 1 for specific possible World Bank assistance.

- **Privatization or Commercialization of Sector Enterprises**

The privatization and commercialization of sector operations, and attendant restructuring, will help adjust the corporate and cost structure of transport enterprises so that they become viable. If left untouched, these enterprises would not be credit worthy, would be unable to raise capital to assure their sustainability, and would be candidates for liquidation.

- **Cost Recovery for Transport Services and Infrastructure**

Cost recovery by means of restructuring does not guarantee minimum transport costs. This can only result from competition among suppliers of transport services within and across sub-sectors. The need to ensure competition and have market determined prices leads to the liberalization of entry and prices for transport services.

- **Rehabilitation of key infrastructure**

Armenia should consider investment in new infrastructure only when the existing services are brought back to a reasonable level of operation and traffic has started flowing again. Today, the humanitarian food aid cargo makes up most of the rail traffic. Such traffic is temporary. Significant transit traffic for the railways such as it once existed is not likely for as long as the Caucasus region remains unsettled.

(b) A short-term assistance strategy including:

- **Initiation of institutional strengthening**
- **Rehabilitation and maintenance of the most critical transport infrastructure**

ANNEX 1

TRANSPORT SECTOR REVIEW

POLICY NOTE

POSSIBLE

WORLD BANK

ASSISTANCE

POSSIBLE WORLD BANK ASSISTANCE

Short Term Assistance

1. Given the urgent needs to assist the Government of Armenia with the rehabilitation of transport infrastructure, it is proposed to start with an IDA credit for a Trade and Transport Facilitation Project for fiscal year 1999 at the earliest. The project would directly address existing bottlenecks and be a catalyst for the adjustment of the sector and restructuring of its institutions. It would have two main components, institution building and investments, as follows:

- **Institution Building Component,** which could include (i) support to teams preparing sector reforms and cost recovery systems; (ii) assistance for the formulation of technical and legal frameworks necessary to the restructuring, commercialization and privatization of sector entities[1]; and (iii) managerial assistance for public and private transport enterprises. This component could be financed through donor grants.

- **Investment Component,** which could include the financing of selected equipment, spares, and rehabilitation works to remove existing bottlenecks in the transport sector, e.g. the most deteriorated bridges or critical sections of the railroad and road networks. This component, oriented to restore existing physical capacity to address current needs, *would not cover new investments in transport.*

These actions would amount to a necessary first step, and would lay down the basis on which to develop a program of financial assistance for transport once economic recovery is established.

2. The Trade and Transport Facilitation Project would be prepared in close collaboration and coordination with USAID, WFP, EU-TACIS and EBRD. Given the severity of current transport dysfunctions, it is also recommended that the short term phase of World Bank assistance be accelerated to the maximum extent possible under the Country Assistance Strategy for Armenia.

Medium Term Assistance

3. The rehabilitation, restructuring, and orientation towards a market economy of operations in the sector could be assisted with additional lending over the following five year horizon. The extent of this medium term assistance would be subject to: (a) the successful implementation of the Trade and Transport Facilitation Project; (b) economic recovery in neighboring countries and demand for transit or international transport services; and (c) increased economic activity and transport demand. Possible World Bank and/or other donors assistance should be targeted as follows:

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[1] This sub-component could also include assistance for a study on the cost-effectiveness of urban transport electric vehicle operations (tram and trolley) in Yerevan. The study would help determine whether it is advantageous to continue to operate these electric systems.

- ***Rehabilitation of the Core Road Network.*** Clearance of Armenia's severe backlog of maintenance and rehabilitation of international roads would require about US$100 million. It would help consolidate the system of bidding to private construction companies for road works and maintenance, establish cost recovery systems, and would help establish a mechanism for the rehabilitation of rural roads.

- ***Restructuring the Railways.*** Under the current financial conditions and institutional and organizational structure, the railways will find it difficult to compete in the future market. A corporate strategy needs to be developed and implemented. This strategy would address privatization issues, the necessary revision of the fare structure to reach cost recovery and generation of debt capacity to carry out investments, and the essential update of accounting systems. Asset management strategies also need to be formulated, including divestiture where applicable. This project would include, in addition to specific technical assistance, training of technical and management staff, and investments for rehabilitation of selected assets.

- ***Restructuring Urban Transport Services.*** Technical assistance is needed to privatize the urban transport sub-sector. In addition, investment might be necessary to renew buses and procure spare parts for the bus fleet on a continuing basis. Implementation of liberalization of fare structures to allow operation by private operators would also be necessary.

- ***Airline Rehabilitation and Fleet Renewal.*** The implementation of the legal framework recommended above would introduce autonomous commercial airline operations with participation of the private sector, and competition among local and international airlines. Investment may be required to rehabilitate, upgrade and replace the existing fleet. Once identified and evaluated, these investments and training necessary would become eligible for support under financial guarantees.

- ***Upgrading of Air Traffic Control.*** Carefully selected expenditures, now under identification with USAID support, are needed to remove the current isolation of Armenia from the main international over-flight routes and improve access.

4. Investments to be undertaken by the public sector over the next five years should concentrate on rehabilitating the existing infrastructure, rather than on new construction, subject to cost-benefit analysis. Investment by the World Bank would be open to co-financing by other multi- and bilateral organizations.

5. The Ministry of Transport has voiced great interest in investments for the Trans-Caucasus corridor. *Although its development prospects deserve careful studies, under the current situation in Armenia, it would seem advisable to postpone consideration of any substantial investments for the corridor until transit traffic is reestablished on the existing transport capacity. In so doing the Government and the international finance institutions would be concentrating their energies on the most urgent problems facing Armenia's transport sector.*

ANNEX 2

TRANSPORT SECTOR REVIEW

POLICY NOTE

CONSOLIDATED

FINANCIAL ADJUSTMENT
AND
RESTRUCTURING

PLANS

Table 1

TRANSPORT SECTOR

FINANCIAL ADJUSTMENT and RESTRUCTURING PLANS

ACTIONS	Railways	Metro
Asset Restructuring		
Net Assets Revaluation	From current $14 mln to about $110 mln	From current $6 7 mln to about $100 mln
Depreciation	Full depreciation over 20 yrs	Full depreciation over about 33 yrs
Tariff Adjustment and Rationalization		
Recommended Tariffs (or Charges) Increase	Passenger from current 0 52 USc/pass km to 3 00 USc/pass km in 1997 Freight from current 2 00 USc/ton km to 7 50 USc/ton km by 2002	From current 7 USc/trip to 25 USc/trip by 1999 and 28 USc/trip by 2003
Other Recommended Measures	Discontinuation of passenger service by 1998, and, in the meantime, termination of privileged or reduced fare passenger transport requirements	Termination of privileged or reduced fare passenger transport requirements
Staff Reduction and Salary Increases		
Staff Reduction	From current 6,650 to about 3,000 employees over the next 3 years	From current 1,440 to about 1,200 employees over the next 2 years
Salary Increase	From current $20/month to $35 in 1997, 20% yearly growth thereafter	From current $34/month to $50 in 1997, 20% yearly growth thereafter
Severance Payment	Up to 2 years of salary	Up to 2 years of salary
Cost Reduction Program		
Divestiture of Non-Transport Activities	Mainly non-railway commercial activities, including trade	All non-metro activities
Other Measures	Rationalization of the cost structure of the railways, including closure of all unprofitable services, rationalization of the number of shops and depots on the network & sale or rental of industrial branch lines to their main users	Sale of unused or unnecessary assets, sale or rental of Metro premises and sites for advertising, newsstands, etc
Arrears Repayment Program		
Exploration of Arrears Offsetting Mechanisms	Including, for instance, repayment of State-owned entity receivables with current and future tax payables	Including, for instance, repayment of State budget subsidy arrears with current and future tax payables

ACTIONS	Armenian Airlines	Zvartnots Airport (following urgently needed separation from Air Traffic Control)
Asset Restructuring		
Net Assets Revaluation Depreciation	Revaluation and depreciation of assets so as to initially reach about US$ 6 million in depreciation provisioning per year This would amount to depreciate current gross assets (US$58 mln) by 10%/yr	From current $1 mln to about $70 mln Full depreciation over 18 yrs
Tariff Adjustment and Rationalization		
Recommended Tariffs (or Charges) Increase	Passenger from current 6 5 USc/pass km to 7 6 USc/pass km by 1999 Freight from 60 6 USc/ton km in 1995 to 70 0 USc/ton km by 2001	Take-off charge from current $8 3/take-off to $11/take-off by 1998 Cargo handling tariff from current $53/ton to $250/ton by 2000 Passenger Tax from current $4 8/pass to $7 0/pass by 1999
Other Recommended Measures	Elimination of tariff discrimination between CIS and foreign citizens wherever possible, revision of tour-operator discount policies	Periodic revisions of cargo handling tariffs to guarantee proper coverage of the new cargo terminal debt service requirements
Staff Reduction and Salary Increases		
Staff Reduction	From current 1,950 to about 1,000 employees over the next 5 years	From current 1,810 to about 1,200 employees by 2000, 1,000 by 2003
Salary Increase	about 15% growth per year from current $142/month	20% growth per year from current $66/month
Severance Payment	Up to 2 years of salary	Up to 2 years of salary
Cost Reduction Program		
Divestiture of Non-Transport Activities	All non-airline activities	All non-airport activities
Other Measures	Allow private companies to operate activities not directly related to air transportation and/or establish joint ventures for these	Allow private companies to operate activities not directly related to the airport and/or establish joint ventures for these

Trucking, Taxis, Urban & Inter-Urban Bus Transport
PRIVATIZATION of the SUB SECTOR

MAP SECTION

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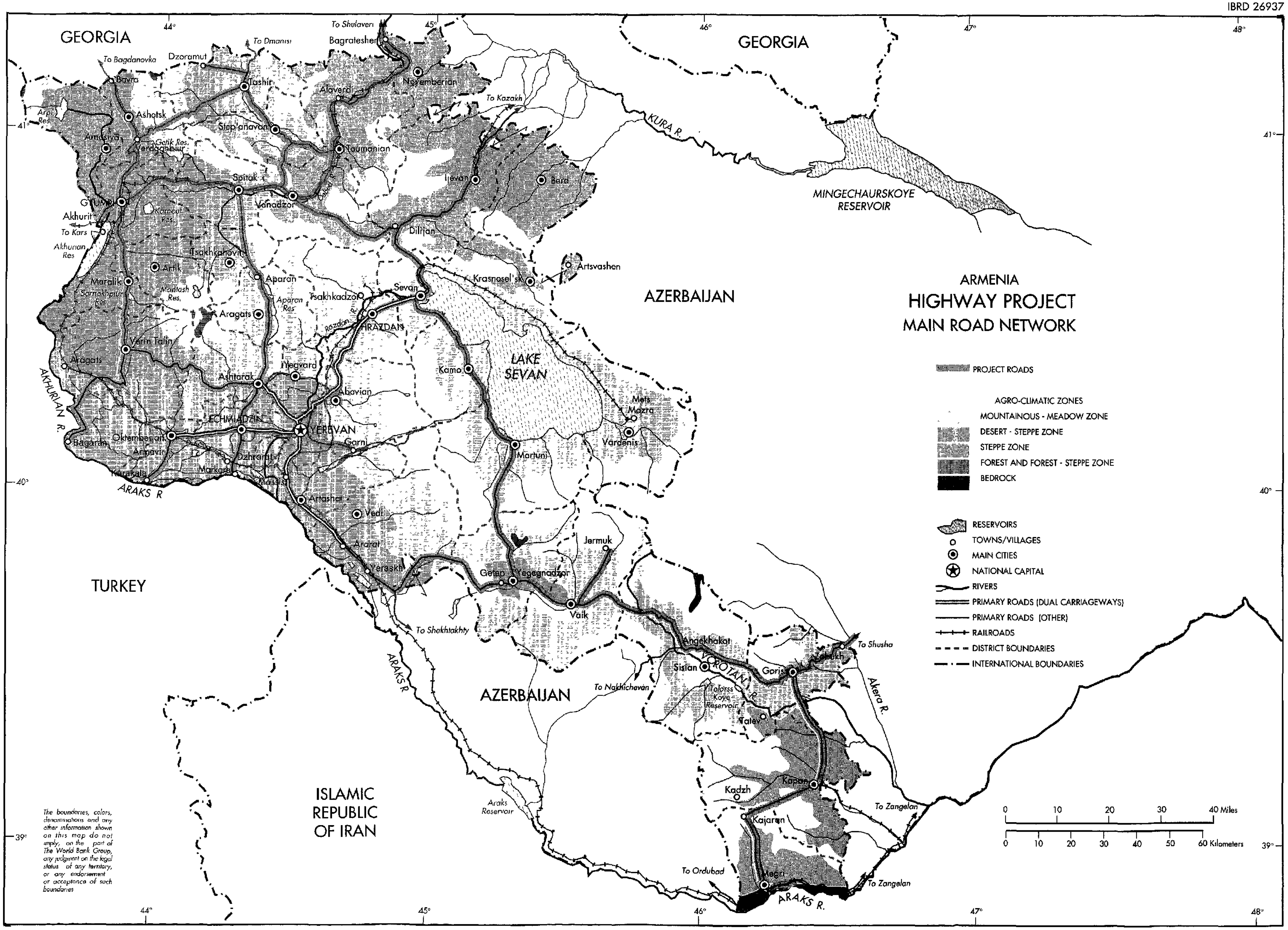

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