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Reform, Commercialization and Private Sector Participation in Railways in Eastern Europe and Central Asia

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TABLE OF CONTENTS

1	Background.....	1
2	Criteria for Assessing Structural Reform	3
3	Overview of Rail Reforms in ECA countries.....	6
4	Russian Federation	8
5	Romania	11
6	Poland	13
7	Kazakhstan	16
8	Croatia	19
9	Estonia	21
10	Lessons Learned and Future Agenda	23

PREFACE

The World Bank is currently undertaking a review of private sector participation in infrastructure in the Eastern Europe and Central Asia (ECA) region. The intention is to write a regional report documenting the experience of private sector participation and commercialization in water, power and rail sectors in Eastern Europe and Central Asia. The report will also evaluate the prospects for private participation in and commercialization of infrastructure in ECA going forward.

This review of the rail sector in ECA will form an input to the wider regional infrastructure review, but is also published separately as it may be of specific interest to rail policy makers and industry leaders in the region.

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Railway policies in the ECA region are evolving rapidly. The situation described in this report is largely based on a 2003 snapshot using 2002 data. In some countries, events may have moved on. Any comments or clarifications from readers will therefore be gratefully received by the author at pamos@worldbank.org.

REFORM, COMMERCIALIZATION AND PRIVATE SECTOR PARTICIPATION IN RAILWAYS IN EASTERN EUROPE AND CENTRAL ASIA

1 BACKGROUND

The World Bank's ECA Region consists of 27 countries stretching from the borders of Western Europe to the Pacific Ocean. These countries range from the largest by area in the world, Russia, to some of the smallest such as Moldova and Armenia. The railway systems in these countries vary greatly. They vary for many reasons including: their geo-political history (for example, whether they were part

of a wider system such as the former Soviet or Yugoslav railway systems); country location (for example, whether or not they are land-locked); main economic activities (particularly whether or not there are high production levels of bulk natural resources such as coal, ores or oil); international trading patterns; and population density and distribution. Table 1 illustrates the diversity of railway systems in ECA in terms of network size, traffic task and density of rail network compared to country size.

Table 1. Summary of Railways in the ECA Region (2002).

Country	Traffic Network (route-km)	Traffic Pass-km (millions)	Tonne-km (millions)	Total traffic units (millions)	Country area (sq km, 000)	Network density (km/sq-km)
Albania	440	123	21	144	29	15.2
Armenia	711	48	452	500	30	23.7
Azerbaijan	2122	584	6,980	7,564	87	24.4
Belarus	4318	14,349	34,169	48,518	208	20.8
Bosnia&H.	1032	52	309	361	51	20.2
Bulgaria	4318	2,598	4,627	7,225	111	38.9
Croatia	2727	1,195	2,206	3,401	57	47.8
CzechRepublic	9499	6,597	15,772	22,369	79	120.2
Estonia	1194	177	9,697	9,874	45	26.5
Serbia&Mont.	3809	1,023	2,263	3,286	102	37.3
FYRMacedonia	699	98	334	432	26	26.9
Georgia	1528	401	5,075	5,476	70	21.8
Hungary	7729	10,531	7,752	18,283	93	83.1
Kazakhstan	13597	10,449	133,088	143,537	2725	5.0
Kyrgyzstan	417	43	395	438	200	2.1
Latvia	2270	744	15,020	15,764	65	34.9
Lithuania	1753	498	9,767	10,265	65	27.0
Moldova	1120	315	2,715	3,030	34	32.9
Poland	20223	17,310	46,563	63,873	323	62.6
Romania	11364	8,502	17,197	25,699	238	47.7
Russia	85542	152,900	1,510,200	1,663,100	17,075	5.0
SlovakRepublic	3657	2,682	10,383	13,065	49	74.6
Tajikistan	617	41	1,085	1,126	143	4.3
Turkey	8671	5,504	7,848	13,352	775	11.2
Turkmenistan	2523	1,127	7,476	8,603	488	5.2
Ukraine	22079	50,544	193,141	243,685	604	36.6
Uzbekistan	4126	2,018	18,428	20,446	447	9.2

Table 2. ECA Railways: Traffic Task, Density and Traffic Mix (2002).

Country	Total traffic units (pass-km + tonne-km) (millions)	Traffic density (traffic units/route-km) (thousands)	Employees (thousands)	Traffic units per employee (thousands)	Traffic mix proportion passengers (percent)
Russian Fed.	1663100	19442	1222	1361	9
Ukraine	243685	11037	370	659	21
Kazakhstan	143537	10557	114	1263	7
Poland	63873	3158	143	446	27
Belarus	48518	11236	75	644	30
Romania	25699	2261	88	293	33
Czech R.	22369	2355	86	261	29
Uzbekistan	20446	4955	42	488	10
Hungary	18283	2366	56	328	58
Latvia	15764	6944	13	1176	5
Turkey	13352	1540	46	290	41
Slovak R.	13065	3573	43	304	21
Lithuania	10265	5856	13	802	5
Estonia	9874	8270	4	2741	2
Turkmenistan	8603	3410	16	540	13
Azerbaijan	7564	3565	29	258	8
Bulgaria	7225	1673	36	198	36
Georgia	5476	3584	16	333	7
Croatia	3401	1247	16	212	35
Serbia & M.	3286	863	29	114	31
Moldova	3030	2705	15	198	10
Tajikistan	1126	1824	6	187	4
Armenia	500	703	4	115	10
Kyrgyzstan	438	1050	5	88	10
Macedonia	432	618	4	112	23
Bosnia & H.	361	350	7	53	14
Albania	144	327	2	62	85

Despite their diversity, the common factor among railways in the ECA region is that they are operating in transition economies. These economies are evolving from ones in which central economic planning largely determined the role, scale and resources devoted to the railway system. Turkey is not a transition country but the role of the State in the railway industry since its establishment has been pervasive. The industry can be reasonably considered within a similar transition framework.

In all the ECA countries, market forces are increasingly determining the generation, distribution and market shares of transport demand. This requires policy responses by the governments who own railways. It also requires managerial responses by those running state railway businesses. Both sets of responses should be encompassed in a reform process.

Reform in the railway industry, as in any other industry, inevitably challenges many entrenched interests. It is rarely undertaken without strong political pressure and support. Usually, it is the emergence of financial distress which both signals the impact of market forces and creates the political will and impetus for reform. Financial distress is not coincident with budgetary support per se. Public financial support is the international norm for rail passenger services. Instead, distress denotes that the level of support is unsustainable or out-of-control. Financial distress can be evidenced in many ways: escalating accounting losses; chronic cash flow and debt crises; increasing budgetary intervention and/or clear deterioration of assets due to inadequate investment. All the railways in the ECA region experienced most of these financial pressures in the 1990's but the extent of these pressures, and recovery from them, has varied widely.

The ability of a national railway to be financially self-sustaining is related to numerous factors but two are particularly important: the intensity of utilization of railway infrastructure and proportion of passenger services in the traffic mix. In terms of traffic intensity, railway networks are subject to considerable economies of density; the higher the traffic level on a particular line, the better the utilization of track, rollingstock and labor; and so the lower the unit operating costs. However, for any given traffic level, passenger traffic units are generally more resource intensive than freight traffic units and also likely to generate a lower yield per traffic unit. Table 2 ranks the ECA countries by the size of their traffic task, also indicating average traffic density (intensity of use) and the proportion of passenger services in the traffic mix.

Considering the range of ECA railways in Table 2, those railways enjoying a combination of the highest traffic densities and the lowest proportions of passenger services are indeed those which have proven most financially robust through transition. They have had relatively low or no governments subsidies: they include Russia, Kazakhstan, Estonia, Latvia, Lithuania, Uzbekistan, Georgia and Azerbaijan. By contrast, those with a relatively low traffic density and a high proportion of passenger traffic have suffered much more serious financial difficulties: they include the larger Central European railway systems such as Poland, Romania, Czech Republic and Bulgaria. Not unexpectedly, the most financially distressed railways of all are those with the lowest traffic densities combined with the highest proportions of passenger traffic: Turkey, Croatia, Macedonia and Albania are in this category.

Against this range of different systems and different experiences, the objectives of this paper are to:

- review reform progress in the rail sector in the eastern Europe and Central Asia (ECA) Region to date;
- summarize lessons learned and suggest a reform agenda for the rail sector in ECA going forward.

2 CRITERIA FOR ASSESSING STRUCTURAL REFORM

It is wrong to think of railway reform as consisting of a single agreed process. It is equally wrong to think of a 'reformed' railway industry as corresponding to single industry

structure, or to a particular corporate form. Transition involves greater reliance on markets. Reform should therefore most persuasively be seen as a process of adaptation to markets. It follows that different kinds of transport markets (traffic types, mix, distance, competition, etc.) will legitimately yield different forms of railway organization. It is therefore important to assess reform against general principles rather than specific structural models. In this paper the degree of structural reform in the ECA countries is judged against seven main criteria, which include elements of both reform 'process' and reform 'features':

- New railway laws
- Organization forms
- Management structures
- Competition and private participation
- Funding of passenger services
- Labor restructuring
- Commercial business processes

2.1 New Laws

Because of the stark change in the economic philosophy which underpinned all production activity, serious reform of railway organizations in the transition economies has invariably required new laws. These have attempted (to a greater or lesser extent) to create new commercial objectives, adopt new organizational forms, define commercial rights and obligations, give more management freedoms, and establish new forms of governance and accountability.

In some ECA countries this process has been achieved by a major new Railway Law. In others, change has occurred through a succession of Laws that reflect a more gradual evolution of policy thinking. Generally, the countries which aspired to EU membership (some of whom have now joined) were first to adopt new railway laws, including Hungary, Romania, Poland, Bulgaria and Estonia, although financial stress was an equally important driving force in the first four of these. More recently, CIS countries such as Russia, Kazakhstan and Uzbekistan have adopted commercializing laws.

In terms of pricing freedoms, railways in all transition countries emerged from an era in which administered prices were the norm, for both freight and passenger transport. There

are a few countries, most notable Russia and Kazakhstan, where railways have significant market power in the transport sector as a whole, and for that reason tariffs are still subject to independent regulation. But for most railways in the region reform has given railways the right to set their own freight tariffs. By contrast, passenger tariffs still require government approval in most countries of the region and in all countries concession fares for specific community groups are also set by government. Just under half the countries in the region have also embraced some form of track access rights and most of these also now have some form of regulatory unit, usually in the Transport Ministry, to regulate the track access regime and charges.

More than a third of countries in ECA region retain the same (or very similar) legal provisions for railways as those of the previous command economy (even if new railway laws were enacted to provide them with legal status when those countries became independent of previous States).

2.2 Organization Form

Typically, reform has seen the transformation of organizational form of national railways from a traditional department or statutory arm of government to a State-owned enterprise with greater management autonomy. This model tries to separate the policy/regulatory functions of government from the commercial functions of railway management.

A level beyond is to privatize all or part of the State-owned company. This has happened with only one railway industry in the region – that of Estonia. Poland and Romania are planning to privatize rail freight operations but have not yet commenced sale.

2.3 Management Structures

Commercial management structures try to focus resources on serving specific markets. By contrast, most railways that have not been subject to reform have retained traditional structures based on functional divisions (for example, permanent way, signaling, locomotives, traffic operations etc.) and (in larger countries) also on regional management divisions.

At the first level of reform the main lines of business of a railway (such as passengers and freight) are accounted as profit centers. More focused reform can lead to establishment of

separate management units or companies for engaging specific market segments, thereby matching management responsibility to accountability. Stronger structures still may then see the main businesses transformed into corporate entities in their own right, either as subsidiaries of a holding company (Poland) or as separate companies (Romania)

In many countries in the ECA region, track access has been treated as a separate 'line of business' with railway infrastructure managers selling such access to third party train operators. This is mandatory in those ECA countries which are members or aspirant members of the EU. Some other countries, such as Kazakhstan and Russia, have also been attracted to this approach.

2.4 Competition and Private Participation

Traditionally, state railways in ECA countries had a monopoly of train operations on the public rail network (though there were many separately owned industrial railways). They also tended to be strongly integrated with railway supply industries. There was little role for the private sector. In most railway reform programs competitive forces were first felt through divestment of non-core businesses and contracting out to a competitive railway supply industry. This is now more common in the ECA region.

More radically, competition can also be encouraged in the supply of core rail services by providing third party access rights to the railway network to private train operating companies. An increasing number of railways in the region now have at least some private third-party train operating companies operating over their tracks. This has created some contestability with the main state operator in countries such as Romania, Bulgaria, Slovakia, Poland, Estonia, Kazakhstan and Russia. Some other countries have adopted the broad principle of third party access as a general policy but without any implementation to date.

2.5 Funding of Passenger Losses

Few rail passenger services internationally recover all their costs from the farebox. governments in nearly all countries of the world have taken the view that they are willing to fund or 'purchase' a certain level of rail public transport service on behalf of the community as a whole, or on behalf of specific

user groups (such as commuters). In practice, where passenger services are a substantial part of total train services, this has often meant subsidizing infrastructure provision as well.

Budgetary support is least distorting to efficiency when it is given in a transparent way and targeted on the provision of specific services or service levels. This is still rare in ECA but is at least anticipated in some of the new railway laws. It is likely to become much more pervasive in the new and aspirant EU countries as new EU Directives on Passenger Service Contracts begin to bite.

Less satisfactory is simply to cover whatever losses occur by lump-sum deficit financing (or more usually an arbitrary proportion of the losses, depending on the budget constraints of the day). In practice, such ad hoc arrangements are common in ECA countries.

The least satisfactory approach, whether from the viewpoint of efficient enterprise management or wider economic efficiency, is to cross-subsidize passenger losses from freight profits. This is effectively a crude tax on production and/or trade. Nevertheless, it is what most of the more profitable railways in the ECA region are required by their owner governments to do, including Russia, Ukraine, Kazakhstan, Uzbekistan, Georgia and Azerbaijan. This is not surprising. It has not been found easy anywhere in the world for any State-owned enterprise that is overall cash-positive to win a case for further budgetary support from a cash-strapped Ministry of Finance.

2.6 Labor Restructuring

Economic transition in the ECA region led to a major contraction in rail traffic markets due to restructuring of extractive and heavy industries, the privatization and growth of road transport, the break-up of major economic blocks (like the Soviet Union, the CMEA and the Yugoslav Federation) and, in some regions, the impact of military conflicts (such as in South East Europe and the Caucasus).

The substantial falls in railway traffic which occurred during the 1990's created an urgent need to restructure the labor force to meet the new levels of business. The total reduction in railway labor force in the ECA Region between 1989 and 2002 was about 37 percent (or some 1.4 million employees).

Those countries which downsized the labor force against a background of continuing traffic losses, such as Poland, Romania, Croatia and the Czech Republic managed to claw back some of the productivity losses of the 1990's, but were, and in many cases still are, chasing a moving target due to declining traffic. Others, through a combination of labor restructuring and the CIS energy resources boom, managed nearly to regain or exceed the levels of the early 1990's: Russia, Estonia and Kazakhstan provide good examples.

Arguably the 'best practice' in terms of labor restructuring process in the region was that of Polish Railways in the period 2001-2003. The main reasons for this were the extensive prior consultations with Trades Unions; the statutory nature of the entitlements which were set out in the main railway restructuring legislation (described in more detail in Section 6); IFI funding of the program that gave confidence that entitlement could be funded; the establishment of a dedicated and well-resourced unit in the railway to implement the program; a financial package that was generous and which was correspondingly higher for retrenched workers in high unemployment areas; and a supporting program of counseling and retraining options.

2.7 Commercial Culture and Processes

Transition to more commercial operations could be expected to be evidenced in a variety of ways: introduction of formal business planning processes, establishment of professional marketing departments, use of international accounting standards (IAS) or their equivalents, formal capital appraisal and prioritization methods and so on. Some railways have developed very little from traditional non-commercial management methods and controls. Indeed, there is no ECA state-owned railway which could yet be said to exhibit a high level of commercial culture and behavior. For most ECA railways commercial management is much better than it was. But there is still a long way to go.

One railway stands on its own in this respect. Since its privatization in August 2001, Eesti Raudtee AS, the main railway operating entity in Estonia, has achieved substantial improvements in nearly all conventional measures of commercial performance including traffic volume, profitability, capital utilization, labor productivity and financial reporting. It is reasonable to infer high standards of commer

cial business process and culture from this performance, while recognizing that the market provides a relatively benign environment for practicing such standards.

3 OVERVIEW OF RAIL REFORMS IN ECA COUNTRIES

Based on the criteria set out in Section 2, Table 3 presents a broad scaling system for the seven selected elements of railway reform.

Some of the criteria are necessarily broad, and the assessment or progress is in many cases subjective, or may be somewhat dated by recent developments. Some countries have only recently adopted reforming laws which have not yet been fully implemented. Where the commitment of these countries to reform appears high they have been assessed on the

basis that the structures will be implemented. To this extent the results as a whole may be considered 'optimistic'.

In addition, the assessment of reform progress for a specific country does not take account of the fact that the scale and complexity of the challenge differs from country to country. For example, reform of Russian railways is an enormous undertaking involving policy considerations that do not arise in a smaller country; what may be ranked as a 'medium' outcome in terms of a particular criterion does not fairly represent the full scale of achievement in making such changes in the huge Russian system.

However, allowing for the imperfections, Table 4 gives results which are intended to be indicative of progress across the region.

Table 3. Scale of Achievement for each Element of Structural Reform.

Criteria	(1) 'High' reform	(2) 'Medium' reform	(3) 'Low' reform
New railway laws	New laws setting out strong commercial objectives and structures	New laws which indicate some commercial orientation	No new reforming laws
Organization form	Private Company	State owned company or enterprise	Traditional kind of government structure
Management structure	Corporate separation of main lines of business	Divisional separation of main lines of business	Government department or Statutory Authority
Competition and private access to markets	Track access rights for 3 rd party railway operators	Some privatization/competition in rail supply industries	No/minimal competition in input or output markets
Funding of passenger losses	Contractual or formula based funding mechanism	Lump sum deficit financing	Cross-subsidies from freight
Labor adjustment relative to traffic change	High level of labor adjustment	Medium level of labor adjustment	Low level of labor adjustment
Commercial business processes	Well developed	Emerging	Commercially undeveloped

Table 4. Country Rankings According to Structural Reform Criteria							
Country	New Laws	Org'n. Form	Management Structure	Comp'n./ Private Access	Explicit Passenger Funding	Labor Adjustment	Comm. Process
Albania	3	3	3	3	2	2	3
Armenia	2	2	2	3	3	2	2
Azerbaijan	3	3	3	3	3	2	2
Belarus	3	3	3	3	3	3	3
Bosnia i H.	2	2	2	2	3	2	2
Bulgaria	1	2	2	1	2	2	2
Croatia	2	3	2	3	3	2	3
Czech R.	2	2	3	2	2	2	2
Estonia	1	1	1	1	1	1	1
Georgia	2	2	3	2	3	2	2
Hungary	1	2	2	1	2	1	2
Kazakhstan	1	2	1	1	2	2	2
Kyrgyz R.	3	3	3	3	3	2	3
Latvia	2	2	2	1	2	1	2
Lithuania	2	2	3	2	2	2	2
Macedonia	3	3	3	3	2	2	3
Moldova	3	3	3	3	2	2	3
Poland	1	2	1	1	2	1	2
Romania	1	2	1	1	1	2	2
Russian Fed	1	2	2	2	3	1	2
Slovak R	1	2	1	1	1	1	2
Tajikistan	3	3	3	3	3	3	3
Turkey	2	3	3	3	3	2	2
Turkmenistan	3	3	3	3	3	3	3
Ukraine	3	3	3	3	3	3	3
Uzbekistan	2	2	2	3	3	3	2
Serbia & M.	2	3	3	3	3	2	2

Finally, based on the rankings in Table 4 it is possible to divide the countries into three broad groups representing high, moderate and

low reformers with regard to the railway industry. The rankings are shown in Table 5.

Table 5. Ranking of Structural Reform of ECA Country Railway Industries.

'High' Reformers	'Medium' Reformers	'Low' Reformers
Estonia	Armenia	Albania
Bulgaria	Croatia	Azerbaijan
Hungary	Czech Republic	Belarus
Kazakhstan	Georgia	Kyrgyz Republic
Poland	Latvia	Macedonia
Romania	Lithuania	Moldova
Slovak Republic	Russian Federation	Tajikistan
	Uzbekistan	Turkey
	Serbia & Montenegro	Turkmenistan
	Bosnia i Herzegovina	Ukraine

The paper now turns in more detail to a number of specific case-studies: Russia, Romania Poland, Kazakhstan, Croatia and Estonia. Each of the cases has been selected because of particular features.

- Russia is the biggest, most important and most complex railway reform challenge in the region.
- Romania and Poland are the two biggest railways in Central Europe and face somewhat similar challenges. They approached industry structure in different ways; in Poland a holding company structure was used to integrate subsidiary companies whereas Romania fully separated them.
- Kazakhstan has only recently adopted a distinctive reform strategy but it is a strong and radical program that will, if fully implemented, put Kazakhstan at the forefront of state railway reform internationally (not only in Central Asia).
- Croatia is illustrative of policy-making which has been slow to grasp the scale of the market challenge which the railway industry faces; progress is faltering in light of the difficult political decisions which must attend the actions necessary to create a sustainable railway industry at a price which taxpayers can afford.
- Finally, Estonia has been successfully transformed from a single operating division of a regional administration of a Soviet-wide Railway Ministry into one of

the most successful railway companies in Europe.

In the following sections, where EU network density and labor productivity benchmarks are made, these relate to the EU-15 members prior to recent accessions. Other data are mainly for 2002, although data from other years is sometimes used where the 2002 data were not readily available.

4 RUSSIAN FEDERATION

4.1 Background

The Russian railway system carries nearly three quarters of all the rail traffic in the ECA region. Over the country as a whole it has a relatively low network density (about 11 percent of that in the EU-15) though it is higher in western Russia. Russia also has the highest traffic density and (apart from Estonia) the highest labor productivity in ECA by a big margin. Its traffic density/route-km is over five times that of the EU-15 and labor productivity is about twice that of the EU-15. Although passenger traffic is only 9 percent of its total traffic, it remains the world's fourth busiest passenger railway after China, India and Japan. A brief summary of the system is given in Table 6. These statistics refer only to the public railway network. There are also several thousands of kilometers of large independent railway networks serving mining, timber, military and industrial complexes.

Table 6. Summary of Russian Railways (2002)

Descriptor	Unit	
Main rail entity	acronym	RZhD
Route-length	route-km	85,542
Route density	route-km/000sq km	5.0
Traffic units	pass-km + tonne-km (000)	1,663,100
Proportion of passengers	percent by traffic units	9%
Traffic density	traffic units/route-km (000)	19,442
Employees	number	1,222,000
Productivity	traffic units/employee (000)	1,361

The dissolution of the Soviet Union as a single integrated trade area, together with economic restructuring, created a dramatic decline in railway volumes. This decline only began to reverse after the major ruble devaluation in 1997 with subsequent increases in exports of bulk raw materials, particularly oil and oil products. During the 1990's, the industry was led by a government Ministry (MPS) overseeing a number (seventeen in 2001) of regional railway enterprises, and numerous other railway maintenance and supply industries. The regional railway enterprises were highly integrated within their geographic areas of responsibility. They had a significant degree of local management autonomy but within the broad policy, regulatory and procedural framework, and national investment and operating priorities, set out by the Ministry.

The years of traffic decline and asset deterioration in the 1990's followed by the challenges of recovery, led to extensive re-thinking by the Russian Government and MPS as to the best way to organize the railway industry. A number of decrees were issued; on the Concept of Structural Reform of Natural Monopolies (1997); on De-monopolization and Promotion of Competition in Rail Transport Services (1998) and on a Plan for Improving the Structure of Railway Transport (2001). In April 2001 this Plan was approved by the government and Presidium of the State Council. A new Federal Railway Law to give legal effect to the Plan was passed in May 2003. Following a period of intense legal, accounting and management preparation, a new railway company was formally established in October 2003.

4.2 Organization and Management

The most important structural change has been the separation of the policy and regulatory functions of the old MPS from the commercial management of the railway. The latter has been vested in a new joint stock company Russian Railways (RZhD OAO). RZhD commenced operations in October 2003. The President and Management Board report to a Board of Directors chaired by a vice-Prime Minister and containing representatives of Ministries of Finance, State Property, Railways, Transport, Economic Development and Anti-monopoly and administrative representatives from government and Presidential offices. MPS public policy and regulatory functions are to be combined with the Ministry of Transport.

The company is currently vertically integrated: that is, responsible for railway infrastructure

and operations. The seventeen previous regional unitary state entities are now operating divisions of RZhD and their directors report to the President of RZhD. It is possible that some of these regional operating divisions will be merged. It is also intended within this structure that railway infrastructure will be separated from train operating divisions. There is also a planned process of creating subsidiary companies for different lines of business such as for specific suburban rail operations, groupings of long-distance passenger services, specialist or regional freight companies etc. In the passenger area, some 'stand-alone' passenger business units had already been established under the MPS administration, to assist (with some limited success) in trying to attract subsidies directly from local and regional authorities. A decision whether to set up RZhD's main freight operations as a subsidiary company is to be taken after 2006.

The new company is still in its first year and its ultimate management structure has not yet emerged. It is not yet clear how the balance of management authority between regional divisions and business divisions will be resolved. If the logic of the reforms is carried through there will almost certainly be a shift toward the latter. Nor is it clear if lines of business to be established will be maintained as internal divisional entities, or as subsidiary companies, or eventually privatized. However, the founding decrees of the reforms certainly anticipate the gradual separation and possible privatization of RZhD's train operating activities after 2006.

4.3 Competition and Private Participation

The reform plan calls for divestiture of non core health and educational establishments (there are over 1000 of these), privatization of rollingstock maintenance services, and access to the railway network for private freight and passenger train operating companies and for private owners of locomotives and wagons. There are already large numbers of private freight wagons operated on the Russian network by resource producers such as Yukos and Linkoil as well as by small (by US or European standards) rail freight forwarding companies such as Severstaltrans and Russky Mir. Over 80 companies are licensed as private wagon operators owning around 70,000 wagons. It is planned that the private wagon fleet should reach 50 percent of the total by 2010.

It was planned that implementation of rail transport competition be progressed in the first stages of reform. The basis for network access has already been set out in recent Decrees 703 and 710 of 2003. These cover the form and content of draft contracts between RZhD and train operating companies (including those which are subsidiaries of RZhD). They establish that access rules are to be non-discriminatory between all carriers, normally on a 'first come-first served' basis but with priorities established by category of operation in situations where capacity is limited.

The success of this regime in promoting competition in rail services will depend as much on charges levied as on access rights per se. The initial charge for track access for international train operations has been rather strangely established as a discount from normal freight tariffs to reflect a new operator's own provision of locomotives and wagons. This approach has the apparent benefits of simplicity and a relationship to existing tariffs. It should encourage private ownership of rollingstock. But it creates charges to private train operating companies for many railway costs other than a pure infrastructure cost (for example, it implicitly includes part of the cross-subsidy of passenger services and also the cost of some RZhD overhead functions which the companies will themselves have to fund in their own corporate operations). Access charges will almost certainly need to be modified over time if the government's objective of fair competition between rail freight operators is to be achieved.

In the meantime around 30 new rail carrier licenses have been issued by the Ministry of Railways and at least two are already operating.

4.4 Funding of Passenger Services

Although the regional railway entities under MPS were always integrated structures containing infrastructure, freight and passenger services, MPS accountants always carried out broad management costing exercises to gauge the relative performance of these different service types. Through the 1990's, with declining freight volumes, it became clear that the cross-subsidy from freight to passenger services was becoming unsustainable. As an order of magnitude, in the year 2000, the Ministry of Railways estimated the losses to passenger services as being 28 billion rubles (around USD 1 billion).

This is indicative and may not be an exact measure of cross-subsidy as it depends on how joint cost allocations are treated.

The reform program required that the cross subsidy begin to be phased out, with an increasing proportion of the burden being reimbursed by local and regional authorities for the services in their areas. However, it is likely that many long-distance passenger services also lose money which would imply an increasing burden on the Federal budget as cross-subsidies are phased out. It is likely that transfer of the burden of passenger subsidies from freight customers to public budgets will be a very long and ultimately incomplete process.

4.5 Labor Restructuring

Staff planning in Russian railways was traditionally based on labor utilization norms established by the Soviet Ministry of Railways. As traffic level declined, periodic application of these norms led to a significant reduction of labor in the main railway enterprises by about 35 percent between 1990 and 2002. The expansion of freight traffic after 1997 combined with these staff adjustments this has seen labor productivity improve by about 65 percent since 1996.

4.6 Commentary

Russian railways is a large and complex system. It is of a continental scale, is the biggest single employer in the country, and is of crucial economic and social (and therefore political) importance. To have, within six years, conceived and developed a radical and far-reaching reform program and put in place the primary legislation and institutions for its delivery, has been a remarkable achievement.

Nevertheless, most of the program still remains to be implemented. The form and location of Ministerial oversight is not yet clear. The structure and form of companies and divisions within RZhD has not yet been established. As yet, there is little competition in rail services. There is a question mark over whether the access charges for international traffic operations are yet appropriate. And passenger services remain predominantly paid for by freight users.

Other reform models might have been adopted. But the selected approach was most heavily influenced by the political imperative of retaining the network as a nationally

integrated, publicly-owned asset. This reflects a deeply-held public view on the importance of the railway in unifying the many regions and peoples of this vast country. As a result, the decrees and policy statements which led up to the new railway law never wavered on the matters of ownership and integration of the network. Within such constraint, the only way to promote the government's objectives of competition and private investment was through track access rights for private transport operating services.

The abolition of the regional railway enterprises and their delivery to the new RZhd as operating divisions is a centralizing initiative. There are legitimate concerns that too much power is concentrated in one big company. However, the traditional regional/functional management structure needs to be turned by RZhd into a lines of business structure. It is difficult to see how the resources could be re-

configured to achieve this without RZhd first diverting some of the traditionally more conservative management power of the regions to the center. However, this concern does underline the fact that reform is really at a very early stage. A genuine lines of business structure has yet to emerge.

5 ROMANIA

5.1 Background

Romania has the sixth busiest railway by traffic volume in the ECA region and is the biggest in South East Europe. It's network density is slightly above that of the EU-15. However, it has an average traffic density of 2.3 million traffic units/route-km which is only about 60 percent that in the European Union. Passenger services account for around a third of traffic (and over half the trains run). A brief summary of the system is given in Table 7.

Description	Unit	
Main rail entities	acronym	CFR SA (infrastructure) CFR Marfa- (freight) CFR Calatori (passengers)
Route-length	route-km	11,364
Route density	route-km/000sq km	47.7
Traffic units	pass-km + tonne-km (000)	25,699
Proportion of passengers	percent by traffic units	33%
Traffic density	traffic units/route-km (000)	2261
Employees	Number (000)	87,637
Productivity	traffic units/employee (000)	293

Romanian railways were traditionally operated by SNCFR, a monolithic organization with a monopoly of railway services in Romania. As in other transition economies, rail traffic declined rapidly through the early 1990's. For example, Romania's railways carried as much coal and oil in 1989 as its total freight traffic today.

SNCFR management tried to run down the workforce, but could not keep up with the traffic decline, or the mounting financial problems, despite cutting spending on asset renewal. It became evident that more radical options needed to be tried. This meant changing institutions. More than in any other country, the adopted reform program was driven by a single reforming minister convinced of the urgent need for structural change and with a clear vision of how to do it.

The reforms were implemented in July 1998 based on an Emergency Ordinance (12/1998). SNCFR was disbanded as a railway and became a residuary authority, retaining legal status only to administer a number of legal and contractual obligations that could not unilaterally be transferred. The activities of SNCFR were then reorganized into five companies responsible for the following areas: infrastructure, freight, passengers, administration of surplus assets, and an accounting company to provide treasury and accounting services to the other four new companies. A State-financed labor restructuring program was implemented so that the new companies would not have to commence operations with excessive staff.

After 1998 the surplus assets company successfully disposed of many assets not

needed by the new company, particularly obsolete freight wagons. It was at one time reputed to be one of the biggest scrap metal dealers in the region. It was eventually liquidated. The accounting company was also wound-up in due course as the three substantive companies grew in confidence and expressed an understandable wish to bring treasury and accounting functions in-house.

5.2 Organization and Management

The Ministry of Infrastructure is responsible for railway policy and regulatory matters. These include long-term development of the railway network, licensing public and private train operating companies, ensuring non-discriminatory access to the system at approved charges, and overall public oversight of the state-owned railway companies.

The three State-owned railway companies are:

- CFR SA: responsible for managing and operating rail infrastructure;
- CFR Marfa: responsible for operating freight transport services;
- CFR Calatori: responsible for operating passenger services.

For a short time CFR Calatori's regional passenger services were split off into 8 regional passenger companies. The idea was that they would gradually move to being owned or financed by local authorities. However, their operating boundaries did not well match those of local government who in any event did not have the budgets to take over responsibilities. The companies struggled and were re-absorbed back into CFR Calatori. However, the decentralized management of the regional services itself had been found to be beneficial and was retained.

In most countries in the ECA region and in Western Europe, lines of business have been separated either as internal divisions or as subsidiary companies of a holding company. What is rare about the Romanian management structure is that the three companies are legally independent. They are independently accountable to the Ministry of Infrastructure through individual performance contracts agreed between the Ministry. These are rolling four year agreements updated annual. The Ministry of Infrastructure's Rail Directorate also acts as a rail industry co-coordinator on policy matters that are of wider concern to the industry.

This separation of companies is an interesting and attractive feature of the reforms. It was done not only to create more commercially independent and focused entities but also to make it harder for the companies to be reintegrated if the political will for reform were to weaken.

5.3 Competition and Private Participation

Most of the rail supply market in Romania is now private and competitive. By the end of 2003, 20 out of 26 identified non-core activities had been privatized.

The Romanian railway network is now open to third party train operators registered in Romania, subject to obtaining a license from the Ministry of infrastructure and an access contract from CFR SA. A number of private freight train operating companies are now operating on the network, probably attracting around 10 percent of the market. On accession to the EU (expected in 2007) access rights will need to be extended to international rail operators.

In addition, as of early 2004, about 600km of branch lines had been handed over to private operators to operate local passenger services.

5.4 Funding of Passenger Services

Under Article 5 of Ordinance 12/1998 public rail operators receive funds from the State budget or local authority budgets to cover the difference between revenues (based on publicly approved fare schedules) and the costs of operation, plus a profit margin of 3 percent of costs. The above requirements resulted in budgetary payments of USD 170 million equivalent in 2002. Concession fares for particular social groups are also compensated.

Article 5 reserves the right for the subsidized passenger rail services to be tendered out rather than allocated direct to CFR Calatori. This provision has yet been used.

Unfortunately, cross-subsidies from freight to passenger services survived at least until recently through the track access charges regime. In framing track access charges for freight and passenger operations, rail freight in Romania was allocated a disproportionate share of infrastructure costs. This continuation of the cross-subsidy in another (hardly more transparent) guise is driven by national budgetary pressures which means that the

amount of direct passenger support that can be funded from the budget is limited. It is nonetheless regrettable because it represents a hidden tax on economic activity, and on rail freight, in a system where freight is already declining. This situation is not unique (see sections on Poland, Russia).

5.5 Labor Adjustment

Romania has shown itself to be prepared to make substantial cuts in the labor force to reflect new market circumstances. Since 1990, the workforce has been reduced from over 200,000 to 73,000 (including cuts in the pipeline). Nevertheless, policy-makers and managers are chasing a moving target; traffic has declined more or less constantly over that period and productivity remains at not much more than half the levels of the late 1980's.

5.6 Commentary on Romanian Railways

Romania was one of the countries in the ECA region which reformed its railways earliest and most radically. The new companies which were formed in 1998 now have clear corporate identities and operate as independent commercial entities. But major challenges remain. Although traffic levels appear to have stabilized in the last couple of years, productivity still needs to be increased. Further reductions in labor of around 20 percent are planned. However, it is evident that policy makers have to decide whether they can really afford to retain the whole of a network which has an average traffic density of less than 2.3 million traffic units/km. The government is currently considering divesting up to 3,500 km of the least used parts of the network – on

most of these lines traffic levels are under 20 percent of the system average.

The balance of track access charges between freight and passenger train operations is also being reviewed. A rational outcome can only mean a higher allocation to passenger trains. Other things being equal, this would lead to an increase in budgetary support for passenger services. Recognizing this reality, the government is willing to review the level of passenger services which it is willing to fund.

Finally, it is becoming increasingly important to privatize the freight company, CFR Marfa. The newly licensed private freight train operating companies inevitably target those market segments with the highest profitability. Neither private rail freight companies nor private road freight operators will be burdened by the constraints of public ownership imposed on CFR- Marfa. It has been government policy for some time to privatize CF Marfa and it may be argued that it should try to do so while the company still has value.

6 POLAND

6.1 Background

Poland has the fourth busiest railway by traffic volume in the ECA region and the third biggest network. Its network density is some 40 percent higher than the EU-15. And its average traffic density of around 3.2 million traffic units/route-km is about 86 percent of that in the EU-15. Passenger services account for around 27 percent of traffic (and more than half the trains run). A brief summary of the system is given in Table 8.

Table 8. Summary of Polish Railways

Descriptor	Unit	
Main rail entities	acronyms	PKP SA-holding co. PLK Infrastructure PKP Cargo (freight) PKP Intercity (passengers) PKP Regional (passengers)
Route-length	route-km	20223
Route density	route-km/000sq km	62.6
Traffic units	pass-km + tonne-km (000)	63,873
Proportion of passengers	percent by traffic units	27 %
Traffic density	traffic units/route-km (000)	3158
Employees	number	143,200
Productivity	traffic units/employee (000)	446

Polish railways were traditionally operated by Polskie Koleje Państwowe (PKP). Although it was not, as in Russia, a ministry of government PKP effectively operated as a government department and was responsible for railway policy, regulations and operations. As with the MPS in Russia, PKP was sometimes referred to as being 'a state within a state'.

Rail traffic declined rapidly in the period 1989-90 but stabilized at around 65 million tonnes through the mid-1990's. At that time, with some divestment of non-core business and gradual adjustments to the workforce, PKP appeared to its management to be sustainable. There were several studies which urged fundamental reform, including the need to divest the grossly underutilized parts of its very dense network. But a combination of PKP's political and industrial power and its claim to a monopoly of wisdom on Polish railway matters meant that implementation of reforms was rather faltering, concentrating initially on appearance rather than substance.

In July 1995, a new railway Law mandated separate accounting for each of the railways' main businesses (freight, passengers and infrastructure) but the Law was not fully implemented until three years later. Later, in June 1997, a further Railway Transport Law was passed which provided the basis for internal separation of rail infrastructure and licensing of independent train operators. Infrastructure, freight operations, passenger services and traction became separate Directorates of PKP in 1998. While changing the internal organization of PKP these reforms did little to change the commercial culture or operations of PKP. Then, mainly as a result of coal and steel industry decline, freight traffic fell dramatically in 1999 from 61 billion tonne-kms to 55 billion tonne-kms and to around 46 million tonnes by 2002. This created a big hole in revenue expectations. It provoked a severe financial crisis that was exacerbated by reductions in budgetary support for passenger services.

In September 2000 the government therefore passed the much more radical Railway Restructuring and Privatization Law that:

- created a holding company structure;
- gave a legal basis for the transfer of funding for urban and regional services to local government authorities;
- set out a program for restructuring debt;

- set out a labor downsizing and statutory compensation program;
- authorized PKP to issue sovereign guaranteed bonds up to a statutory limit.

It was intended that the bonds and other nominated debts of PKP should be repaid from the proceeds of property sales. This was planned to include the privatization of many of the subsidiary companies, but in particular PKP Cargo, which is one of the biggest freight transport companies in Europe.

6.2 Organization and Management

Since January 2001, PKP SA has been corporatized as a Joint Stock holding company, fully owned by the State. In October 2001, 24 other subsidiary companies were registered and commenced operations under the holding company.

The main subsidiary companies are Infrastructure, Cargo, Inter-City Passenger Services, Regional Passenger Services, Energy, Telecommunications, LHS (a Russian-gauge freight line into Ukraine), SKM (a suburban rail network in the Gdansk/Sopot/Gdynia conurbation) and WKD (a suburban passenger system in Warsaw).

Few of the managers of either PKP SA or the subsidiary companies had any experience of managing within the framework of a holding company structure. There has been a long and still incomplete transition period with many difficulties in terms of establishing group planning and budgeting controls, internal cross-charges, capital investment constraints and priorities, and so on. The framework has not delivered financial stability in most companies; or between the companies in the group; or between the group and the government. Planned bond issues had to be increased beyond those anticipated in the 2000 Law to maintain liquidity.

A regulatory body, Urząd Transportu Kolejowego (UTK) has been established to regulate the Polish railway market.

6.3 Competition and Private Participation

Privatization of maintenance and other supply industries occurred relatively early in transition. Most of the rail supply market in Poland is now private and competitive.

Under the 1997 Law, the Polish railway system is open to third party train operators registered in Poland and from 2006 will under EU regulations be open to international operators too. Over 20 operating licenses have been issued by the Rail Regulatory authority, UTK, to new companies, though not all have used their licenses. Most are subsidiaries of industrial groups carrying company product, but some new companies, such as Rail Polska and Chem Trans Logistics are specialist transport operators.

None of the planned privatizations of PKP subsidiary companies have yet taken place though attempts are currently being made to privatize two commuter operations, WKD (Warsaw) and SKM (Gdansk-Gdynia-Spot region). Privatization of PKP Cargo, the only PKP company which was ever likely to yield a substantial sale price, was deferred. A scoping and sales process may be commenced soon. Under the 2000 Law, the infrastructure company, PLK, must remain in public ownership and control.

6.4 Funding of Passenger Services

Since the enactment of the 1995 Law, PKP has received direct budgetary support of passenger railway services though historically this has fallen short of the actual costs of passenger rail services. More recently, under separate legislation, funding responsibility for regional passenger services has been transferred to local authorities and the government's previous passenger transport allocations are now allocated to local authorities, at increased levels, to meet those obligations.

As in Romania, the freight services still provide part of the financial support of passenger service through the medium of track access charges. An apparently cost-based track access charges scheme is currently in place in Poland. The total revenues should cover all the 'expected' (or forecast) costs of PLK which does not receive subsidy from the State for operating such infrastructure. However, the average price paid by freight trains is almost three times the price paid by passenger trains despite the greater use of track and the greater demands on track standards and train control systems imposed by passenger trains. As noted elsewhere this represents a hidden tax on economic activity and on PKP Cargo, threatening the viability of its sale. The regulatory body, UTK, has not yet addressed this anomaly.

6.5 Labor Adjustment

The Polish railway labor force has been reduced by nearly 60 percent since 1990 from 336,000 to 143,000 in 2002. Of this reduction, nearly 29,000 jobs were bought out under the compensation provisions of the 2000 railway Restructuring and Privatization Law. Unlike Romania, where labor downsizing was traditionally a government financial responsibility, PKP had to finance this program itself from IFI loans, bond proceeds and other own funds. The total cost of employment restructuring was around USD 250 million.

6.6 Commentary

Polish railway reform remains very much a work-in-progress. The current aim is to pursue a period of accelerated reforms and privatizations of train operation companies including both PKP Cargo and PKP Intercity passenger company. This process has yet to begin.

As in Romania, an imbalance exists in Poland between track costs allocated to freight and those allocated to passenger services. Unless the disproportionate share of charges borne by freight services is reduced it will either be difficult to privatize PKP Cargo, or any sale proceeds will be correspondingly reduced. The apparent reluctance of the rail regulator to resolve this matter to date will also reduce possible investor confidence in regulatory arrangements and may of itself reduce the value of PKP companies.

The market value of PKP Cargo will almost certainly have been reducing over the period of delay since the 2000 Railway Restructuring and Privatization Law due to (i) growing competition from road transport; (ii) emerging competition from Polish train operating companies; (iii) the imminence of 2006 when international train companies will also be able to access the railway system, and (iv) investment commitments entered into by existing PKP Cargo management which will reduce the room for financial maneuver of a private owner. As a result, the market value of PKP cargo may be much less than assumed by those who drafted the legislation in 1999 and who anticipated that the privatization proceeds would clear large lumps of debt. It is likely that in Poland, as in most countries, the taxpayers will in due course become liable for much of this debt.

The Polish reform experience is interesting in that it introduced lines of business in a very staged way: from accounting units (1995); to management directorates(1998); to subsidiary companies (2001); and possibly, in the next stage, to private companies. This experience has many lessons for railway restructuring generally: or rather for old lessons re-learned. For example, perhaps too much confidence was put in structural solutions alone. Changes in commercial structure to create lines of business will yield transparency in performance but without changes in commercial culture and business process will not of itself yield better performance. Also, while planned staging has merit, gradualism also means that excessive costs are endured for longer. For example if PKP had implemented its 2000-2002 labor restructuring program five years earlier it

would have saved more in operating costs over the five year period than the total cost of upgrading the Warsaw-Berlin railway link, PKP's largest investment project in that period.

7 KAZAKHSTAN

7.1 Background

Kazakhstan has the third busiest railway by traffic volume in the ECA region. Like Russia it has a very low route density compared to the EU-15 (about 11 percent that of the EU-15). But it enjoys nearly three times the traffic density/route-km and double the labor productivity of EU-15. Passenger services account for only around 7 percent of traffic units. A brief summary of the system is given in Table 9.

Descriptor	Unit	
Main rail entities	acronyms	KTZ: railway holding/infrastructure JSC Kazzheldortrans: freight JSC Passengers JSC Locomotiv
Route-length	route-km	13597
Route density	route-km/000sq km	5.0
Traffic units	pass-km + tonne-km (000)	143,537
Proportion of passengers	percent by traffic units	7 %
Traffic density	traffic units/route-km (000)	10,557
Employees	number	113,688
Productivity	traffic units/employee (000)	1262

During the Soviet period the Kazakh railway system was operated by three regional enterprises of the then Soviet Ministry of railways. Because of the predominance of bulk raw materials carried over long distances, these railways were always among some of the more profitable in the Soviet system. Economic transition, and the disruption of trading relationships with the break-up of the Soviet Union, meant that by 1999 traffic had dropped to a quarter of its level in 1989. However, since then the resource boom has seen strong growth of about 40 percent in traffic between 1999 and 2002.

The Ministry of Transport of the newly independent state of Kazakhstan inherited what was essentially a three railway system. The reform of the Kazakhstan railway sector began in 1997 with the merger of the three railways existing at that time into a new state enterprise (KTZ). The financial problems in the

sector, particularly the shortage of investment funds consequent on the traffic decline, continued to become more serious. A wide-ranging restructuring program was initiated by a new Railway Transportation Law enacted in 2001.

The 2001 program had three phases:

- Phase 1 Commercialization
- Phase 2 Competition
- Phase 3 Privatization (part)

During the last three years there has been significant progress in implementing the first phase of this plan. All social and cultural activities had been divested by the end of 2003 and all supporting activities (for example, track and rolling stock repair workshops, telecommunications, security etc.) have been created as separate companies. Passenger

operations were set up as a separate company under the Ministry of Transport and Communications in 2003. In January 2004 the freight train operations and majority of freight wagons were transferred to the newly-created State-owned freight operator. The locomotives were transferred to a separate company (JSC Locomotiv).

In February 2004 the government passed Decree 145 which has re-confirmed the importance of the wider objectives of competition and privatization. It sets out a comprehensive framework and timetable for actions to be taken over the period 2004-2006. The reforms are being rapidly implemented and the situation changes daily. The description below encapsulates existing and planned changes.

7.1 Organization and Management

The reforms are currently establishing separate roles between:

- Ministry of Transport and Communications (MOTC) which determines railway industry policy and approves access for private Train Operating Companies (TOCs) wishing to use railway infrastructure;
- KTZ which will in future be a publicly-owned railway infrastructure company;
- KTZ's passenger business (JSC Passengers) and freight business (JSC Kazzheldortrans) which will be commercially autonomous (though publicly owned) TOCs;
- The Regulator (the Anti-Monopoly Committee) which will approve the track access regime and track charges on the basis of non-discrimination between TOCs (whether public or private).

Much of this structure is already in place in an industry in which, only a few years ago, the State Railway Company itself was effectively policy-maker, regulator, infrastructure owner and exclusive operator of both passenger and freight trains on the public network.

As noted, KTZ's freight operations are to be transferred into a new freight company, Kazzheldortrans, which was formally registered in January 2004. However, during the Program period (2004-2006) Kazzheldortrans will remain a subsidiary company of KTZ. The separation of corporate identity and

management is certainly a major step, but the retention of corporate linkage is, prima facie, a weak point. It carries with it the danger that KTZ may show favor to its subsidiary freight company compared to private freight operators, and thereby inhibit competition in the freight transport market. However, such arrangements are not uncommon internationally. The great majority of EU railways and some elsewhere, have also retained corporate links between infrastructure and train operating companies, while at the same time promoting third party access. But it is nonetheless a rather ambiguous arrangement in a Program which in a number of other areas sought more radical structural solutions.

7.2 Competition and Private Participation

The reform program aims at introducing or extending private participation and competition in the industry in the following areas:

- Freight train operations (through open track access): several licenses have been issued and two new freight operators (Bogatyr Trans and Transcom) have been accepted on KTZ's network; these two coal companies are operating some 6000 wagons.
- Passenger train operations (through franchise competitions, assisted by access to passenger rolling stock which will be owned by a special purpose company and hired to winning bidders)
- Railway security services (through privatization and competitive tendering)
- Track repairs (through privatization of track repair units and competitive tendering)
- Locomotive maintenance and repairs (through privatization of workshops and competitive tendering)
- Freight and passenger wagon maintenance and repairs (through privatization of workshops and competitive tendering)
- Locomotive and wagon ownership (private supply will be encouraged through open access and non-exclusive haulage: this will also encourage a competitive leasing market)
- Short lines (through sale of such lines to their major users)

- Rail container operations (through sale of 74 % shares in Kaztranservice (which runs container trains): and sale of 67% of Kedentranservice (which operates terminals) which should give private operators equal access to container yards)
- Railway laundries
- On-board passenger train services (to be leased by competitive tender to private sector)

In practice, it may not be practically possible to realize the level of private sector participation and competition which is sought within the period specified (particularly in passenger train services). But the commitment of the Program to both private involvement and competition is impressive. The industry will be no worse off by trying.

One manifestation of this commitment to competition is that the Ministry of Transport and Communications has also identified a substantial number of locomotives and freight wagons which are surplus to immediate requirements. These have been taken under the wing of a unit reporting to the Ministry which will sell the surplus stock to private entrants.

In addition, JSC Locomotiv will hire locomotives (and drivers) to both the public and private train operators who choose to use their services (the Company has no exclusive right of haulage and any operator can procure their own equipment). The model of a separate locomotive company was chosen:

- to ensure non-discriminatory access to haulage by new entrant private Train Operating Companies (TOC): the cost of locomotives is seen as an important barrier to new entry which this approach is intended to reduce;
- to ensure no compromise in safety in that the current systems of safety management of the fleet and drivers should not be disrupted during the transition;
- Kazakhstan has few dedicated freight or passenger locomotives. They are nearly all used for both types of service and there was a concern that if the fleet were to be divided the system would lose flexibility and utilization;

7.3 Funding of Passenger Services

Only JSC Passenger Transport will receive subsidy from the central government budget.

It is intended that the suburban company will contract with and receive subsidies from relevant Local governments, or the local governments will be offered the rollingstock to run their own services. Some local subsidies are already received for these services.

JSC Passenger Transport's subsidies will be in the form of a PSO contract which will identify the lines and services which the government is willing to finance. The remainder are to be funded by the Company. The company has a management costing model to identify broad costs by route, locomotive type etc., though it needs further development.

Some progress is being made in transferring the public service obligation for passenger service from KTZ to government. Of the 65 percent of passenger costs not covered by passenger revenue, the government has agreed to share the subsidy burden in 2005, on the basis of 28 percent by government and 37 percent by KTZ. Ownership of the passenger service company will be transferred in January 2005 from KTZ to MOTC with plans to franchise out the provision of passenger services. Responsibility for funding passenger services therefore will be transferred from KTZ to the government. Subsequently, transit passenger services (for example, Tashkent to Moscow) will be expected to pay their full cost. The government will subsidize passenger services between oblasts. Funding for passenger services within oblasts (i.e., commuter services) will be the responsibility of the oblast.

7.4 Labor Adjustment

The Kazakh railway labor force has been reduced from around 182,000 in 1990 to 114,000 in 2002. Although labor productivity plummeted in the 1990's, almost to EU-15 levels, a combination of labor downsizing and traffic increase has seen a doubling of labor productivity between 1999 and 2002 and it is now the second highest in the ECA region after Russia.

7.5 Commentary

The current program is a comprehensive and well designed phase in the unbundling of the railway industry which seeks to encourage private participation and competition in both supply industries and rail services. If it is achieved, it will put Kazakhstan at the forefront of rail reform in the CIS countries.

There are a few aspects of the Plan in which an alternative approach might seem more appealing including the earlier separation of JSC Kazzheldortrans from KTZ itself and the distribution of at least some of the locomotive fleet directly to Kazzheldortrans and the Passenger company.

However, restructuring an industry as large and complex as Kazakhstan's rail industry is a formidable challenge both for those planning it and those whose interests may be threatened by it. It would be unrealistic to expect that any structure could satisfy them all. Equally, a structure which is unacceptable to any of the major players would not be implementable. Compromise is both inevitable and desirable if progress is to be made.

Moreover, the Program is staged and transitional: there is plenty of scope for fine-tuning specific aspects as the Program proceeds.

8 CROATIA

8.1 Background

Croatia has one of the smaller railways in the ECA region, though the largest by traffic volume among the former Yugoslav railways. Its network density is a little higher than in the EU-15 but average traffic density on the network of around 1.2 million traffic units/route-km is only about a third of that in the EU-15. Passenger services account for around 35 percent of traffic units, one of the highest levels in the ECA region. Labor productivity is a little less than a third of that in the EU-15. A brief summary of the system is given in Table 10.

The former Yugoslav Railways were traditionally operated by regional administrations corresponding to republican boundaries so that with Croatian independence the previous railway administration became the Croatian Railways. The enterprise was almost immediately faced with the triple challenges of economic transition to a market economy, the break-up of trading patterns of the federal Yugoslavia, and the military conflicts of 1991-1995 which disrupted all railway traffic in this region and destroyed a significant quantum of Croatia's railway assets.

Traffic plummeted by three-quarters between 1989 and 1995. The result was that by 1995 budgetary support of operations exceeded

commercial revenues. Nearly all new capital investment was being funded by the State.

Table 10. Summary of Croatian Railways.

Descriptor	Unit	
Main rail entity	acronym	HZ
Route-length	route-km	2,727
Route density	route-km/000sq km	47.8
Traffic units	pass-km + tonne-km (000)	3,401
Proportion of passengers	percent by traffic units	35 %
Traffic density	traffic units/route-km (000)	1,247
Employees	number	16,077
Productivity	traffic units/employee (000)	212

In 1994, a new Railway Law was enacted that was intended to corporatize HZ and provide the legal basis for reforms. These were intended to include privatization of non-core businesses, staff adjustments, financial compensation for passenger services on certain branch lines, an increase in share capital and government funding of repairs for war damage and investment in new infrastructure for economic development needs. The preamble to that law envisaged the eventual privatization of HZ. However, the Law contained a transitional clause relating to the war. On this basis it was not actually applied until 1999, by which time the financial position of the railway had further deteriorated.

In July 2003 a new, more radical law was passed by the Parliament which was to have come into force in January 2005. This Law was prepared in close co-operation with the EU and reflects EU principles with regard to giving track access to licensed third party train operators. All HZ's historic debt would be taken over by the State (which had effectively happened already, since there is no way that HZ could repay it). The Law permits transfer of branch lines to local authorities. It creates enabling provisions for the concessioning of all or parts of the railway system. It requires that capital investment in railway infrastructure become the responsibility of government through a five-year National Program for Railway Infrastructure requiring parliamentary

approval. Finance for infrastructure is to be obtained from many sources which would include track access charges, state and local authority budgets and a dedicated share of the tax on liquid fuels, most of which would have come from road users.

Unfortunately, the implementation of the 2003 Law and the restructuring program it underpinned have also been deferred until at least 2006 and the fuel tax contribution to railways will be dropped. Moreover the new law is not sufficient to implement all the reforms implicit in it. Further legislation would still be needed to support the separation of rail infrastructure and operations, plans for railway safety, for the establishment of a railway regulatory body, and for any privatization of Croatian Railways.

8.2 Organization and Management

HZ remains an integrated railway. There are internal divisions managing infrastructure, locomotives and rollingstock, and passenger and cargo transport, but they are closer to being cost centers than profit centers. Accountability for lines of business is therefore rather weakly represented through periodic management accounting. There is little evidence of day-to-day profit center accountability which would be associated with harder delineation of business lines.

The sixteen subsidiary activities, representing activities such as printing, catering, design engineering, maintenance of rollingstock etc., are autonomously managed. Some have been successful in diversifying income from external customers.

8.3 Competition and Private Participation

The government has for a number of years refrained from enacting the privatization Law that would have provided a legal basis for the privatization of HZ's sixteen non-core subsidiary companies. None has yet been privatized despite an apparent intention to do so that has endured for many years.

There is also no right of access to the Croatian railway network. and the legislation required to permit this is probably at least two years away.

There is therefore little private sector involvement or competition either in HZ's input or output markets.

8.4 Funding of Passenger Services

The level of HZ's losses imply that virtually all passenger services and most freight services must be unprofitable. Few services would even cover their train operating costs. The original 1994 Law envisaged the development of PSO payments related to specific services. But as in most countries where most services are unprofitable, block deficit funding from the budget is de facto the most form of subsidy and this has been the model in Croatia.

Until recently, HZ had always been able to cover most of its deficit either through budgetary support or through government-guaranteed loans, though subject to the vicissitudes of budget funding. In 2004, the government's financial support to HZ will be more substantially cut by the government to reduce the fiscal deficit. It seems that for the foreseeable future HZ will need to live with a lower level of financial support from the government. It will only be able to do so by heavier cutting of staff, services and network than hitherto.

8.5 Labor Adjustment

Croatia's railway labor force has reduced by around 60 percent since 1989 from about 41,000 to about 16,000 in 2002. Indeed, in the last five years a combination of staff retrenchments and traffic increase has seen railway labor productivity increase by about 70 percent, though it is still at only about a third of EU-15 levels. However, nearly half of the reduction in recent years has been through transfer of staff to subsidiaries, the privatization of which has been periodically delayed.

8.6 Commentary

Croatia's restructuring plan, as developed in the second half of the 1990's was evolutionary: non-core activities would be divested but otherwise HZ would remain an integrated State-owned enterprise with a rather weak lines of business structure; there would be gradual reductions in network size, in passenger services operated and in staff levels; the government would take only capital responsibility for war damage and strategic investments and would support specific passenger services with PSO payments for loss-making branches.

It is not clear that Croatia could afford such a gradualist approach to reform. There were

unrealistic expectations on the part of some decision-makers as to how much of the volume of traffic loss was due to the war and how much due to structural changes. Freight traffic increased by 28 percent between 1996 and 2002. This was a significant and welcome market response to post-war stability but it is modest in the context of the volume reductions that had been due to economic transition, changes in trading patterns and competition from road haulage. Moreover, these freight traffic increases occurred at diminishing revenue yield as road competition put pressure on tariff rates.

At the same time the gradual reduction of labor was offset by increases in average earnings and in labor employed in subsidiary companies, which have still not been privatized. In practice, HZ's financial situation now only marginally better than in the mid 1990's at the end of the war.

Now the new program based on the 2003 Law is also being again deferred. Based on the record, it is unlikely that any of its more

substantive provisions will have been achieved until the end of this decade; indeed, since much of the legislation is of an enabling rather than a prescriptive character, possibly not by then.

9 ESTONIA

9.1 Background

The Estonian railway system is one of the smallest by network length in the ECA Region but carries substantially more traffic in absolute terms than many much larger networks, for example, those of Bulgarian or Croatian railways. Its average traffic density/route-km is over twice that of the EU-15, nearly 98 percent of which is freight. As a result of its favorable traffic characteristics and a cost-conscious management, its labor productivity is the highest of any railway in the ECA region and about four times that of the EU-15. A brief summary of the system is given in Table 11. Statistics given are for the main operator/network, Eesti Raudtee.

Table 11. Summary of Estonian Railways.

Descriptor	Unit	
Main rail entities (see below for all entities)		Eesti Raudtee AS: main railway lines and freight trains: Edelaraudtee AS: passenger services and lines in south and west Estonia and access operations on main lines.
Route-length	route-km	Eesti Raudtee: 690 km Edelaraudtee: 320 km
Route density	route-km/000sq km	26.5
Traffic units	pass-km + tonne-km (000)	9,874
Proportion of passengers	percent by traffic units	2%
Traffic density	traffic units/route-km (000)	8,270
Employees	Number	3,602
Productivity	traffic units/employee (000)	2,741

After 1940, the Estonian railways had become one of three operating divisions of the Baltic Railway, one of the 32 regional railway administrations in the Soviet Union reporting to the Ministry of Railways (MPS) in Moscow. There were over 170 such divisions in the Union as a whole. Following Estonian independence what was previously simply an operating division of a regional administration became in 1992 a national railway, Eesti

Raudtee. Because the headquarters of the Baltic Railway had been in Riga (Latvia) the new EVR organization lacked some technical and managerial skills. However, it also had the advantage of not inheriting the embedded bureaucratic culture and apparatus of a Regional headquarters.

As elsewhere in the region traffic initially fell and by 1995 was at around half of its 1989

levels. Passenger traffic has continued to decline since. But as in the Russian Federation, for which Estonia is a key transit route, traffic started increasing from the mid-1990's. By the year 2000 Estonia's freight exceeded its 1989 levels. This has still not occurred in any other country in the ECA region and represents both good fortune in the opportunities created by the Russian resources boom and good management of the Estonian ports and railways sectors in responding positively to those opportunities.

In 1997 the state-owned enterprise Eesti Raudtee was split into a number of new entities:

- the main company became a joint-stock company Eesti Raudtee AS operating under companies legislation, responsible for the main international lines and freight services using them;
- predominantly domestic passenger lines in the south and east of the country were vested in a new passenger company, Edelaraudtee Ltd, which was then privatized: Edelaraudtee also now offers some passenger services on Eesti Raudtee's network under a service contract with government for which it pays track access fees to Eesti Raudtee;
- international passenger services (to/from St Petersburg and Moscow) were transferred to a train operating company, EVR Express; 51 percent of shares were sold to investors and 49 percent were retained by EVR;
- commuter trains in the Tallinn area were also transferred to a suburban train operating company, Elektriraudtee Ltd., still publicly owned.

In April 2000 the Estonian privatization Agency announced the impending sale of 66 percent of the share capital of Eesti Raudtee AS to a strategic investor through an international competition. Following a rather vexed competition in which an initial preferred bidder was unable to complete the transaction, majority ownership was sold to the second preferred bidder, Baltic Rail Services (BRS), in August 2001. This was the first privatization of a vertically integrated national railway in Europe.

The remainder of this section concentrates on the main Estonian railway company, Eesti Raudtee AS and to a lesser extent on the main passenger operator Edelaraudtee AS. Although

the latter is a very small operation Estonia is the only country in ECA to have effectively privatized all its non-urban passenger operations and is therefore of particular interest.

9.2 Organization and Management

Eesti Raudtee is an integrated rail infrastructure and freight operator. The company is owned 66 percent by BRS and 34 percent by the Republic of Estonia. BRS itself consists of Estonian, US and UK shareholders. The US shareholders have extensive experience in the railway industry internationally while the UK shareholders have been heavily involved in rail infrastructure maintenance and renewal activities in the UK. The Company has Supervisory and Management Boards.

The acquisition of Eesti Raudtee by BRS was accomplished partly by a loan from the International Finance Corporation (IFC). This loan was re-financed in 2003 and the favorable terms on which it did so is possibly indicative of the rapid growth of market confidence in the privatized company. According to the Company's 2004 Annual Report, the Company is now considering the possibility of an initial public offering.

9.3 Competition and Private Participation

The proportion of private sector participation in the Estonian railway industry is not only the highest in the ECA region but is arguably the highest in Europe as a whole, even including the UK.¹ Edelaraudtee is wholly privately owned. Eesti Raudtee is 66 percent privately owned. Only the Tallinn suburban services of Elektriraudtee remain publicly owned. Moreover, at the time of its sale of 66 percent of shares in Eesti Raudtee it was anticipated that the government may at some stage divest the remaining proportion of its shares.

In terms of competition, at the time of privatization of Eesti Raudtee, there was already a significant private freight train operation on Eesti Raudtee's tracks, carrying oil products between a Russian refinery and

¹ In UK the railway network is now owned by Network Rail, which is a 'company limited by guarantee', without private owners of its risk capital. Since the company's creditworthiness is determined principally by the extent of state guarantee it could be argued that it is generically closer to a state-owned enterprise than a private company.

the Port of Tallinn. This traffic continues to pay Eesti Raudtee track access charges for its train paths. In 2003 third-party freight and passenger operators provided around 12 percent of Eesti Raudtee's revenue.

Although Eesti Raudtee is a vertically integrated freight services and rail infrastructure company a condition of sale is compliance with EU legislation including third party access conditions.

9.4 Funding of Passenger Services

Edelaraudtee (south west passenger railway) and Elektriraudtee (Tallinn suburban services) are provided with revenue support on the basis of agreements with the Estonian Government which establish the conditions and rates of support. The total subsidy to both companies was equivalent to about USD 13 million in 2003. The government has not been prepared to subsidize rail services at any cost. It has allowed replacement of the most uneconomic passenger services in the south west by buses.

9.5 Labor Adjustment

Estonian railways employed about 9,600 people in 1989. By 1998, with gradual downsizing, plus the separation of passenger services, Eesti Raudtee employed around 6,400 people. At the time of privatization in 2001 it employed around 4,255 staff. By January 2004 under private ownership it had reduced to about 2,670 staff, a reduction by about a third. It is noteworthy that the period of heavy reduction since 2001 has coincided with significant traffic growth and improved safety performance.

9.6 Commentary

The major part of Estonian railways has been transformed from a single operating division of the Soviet railway system to one of the most successful and profitable railways in Europe. The simplicity of the network, the key role of the Port of Tallinn, high levels of transit traffic, and Russian resources boom were certainly all favorable to success. Nevertheless the government must take credit for the clear-sighted way in which it first commercialized the organization, separated out the loss-making passenger services and put its faith in private ownership and operation.

Although the financial performance of Eesti Raudtee was already improving before privatization, the impact of private ownership

and management has been considerable. The Company has completely replaced the old Soviet era locomotive fleet with reconditioned US locomotives. Virtually all indicators of capacity, staff and equipment utilization have improved significantly, as has safety. The company had an operating ratio in FY2003 of around 65 percent, easily the best of any national railway organization in Europe.

10 LESSONS LEARNED AND FUTURE AGENDA

10.1 Overview

Railway reform in the ECA region provides a mixed picture. Seven countries could reasonably be described as 'high' reformers: Estonia, Bulgaria, Hungary, Kazakhstan, Poland, Romania and the Slovak Republic. Most of the high and medium reformers have in the last few years adopted new railway laws, adopted more commercial business structures, tried explicitly to address the issue of funding passenger losses, privatized some non-core businesses and encouraged some competition in input (supply) markets. But only Estonia has privatized a core railway transport business while a few other countries (such as Kazakhstan and Romania) have instituted third party rail freight operations for a significant part of the market.

Russia is classified as a medium reformer because the reforms are still at an early stage. But given the scale and complexity of the challenge, it will be the most impressive of achievement if the stated policies for private operations and competition can be realized.

About ten out of the ECA 27 countries have not yet significantly reformed their railway industries, though two or three of these have plans (but not yet legislation) to do so. Those countries judged as being 'low reformers' are not all poor performers. The business and financial performance of the railways in Ukraine and Azerbaijan, for example, is currently improving although there has been little structural change in the industry. However, some of the railways in this group such as Albania, Macedonia, and Turkey are in dire straits.

10.2 Lessons Learned

The international lessons that have already been learned in railway reform have been re-learned in the ECA region. The first lesson is that **reforming a complex industry is a long-term process**: putting in place mutually

supportive legislative, institutional and management structures to deliver substantive change takes a great deal of time and effort. Gradualism in this process can be a merit if it reflects a well thought-out series of steps towards an agreed outcome. Unfortunately gradualism has sometimes simply reflected of lack of clarity in ultimate objectives or a post hoc rationalization of indecision and delay.

Secondly, **structural change is only a means to an end.** It is not of itself sufficient to improve performance. Governments can create the structural platform for improved industry performance but only managements can deliver it. There have been notable exceptions, but most railway administrators and engineers who rose to become top managers within command economy structures did not turn into market-focused business managers overnight just because the law changed. Moreover, many of the most senior positions in railways remain the subject of political patronage and are not necessarily filled on commercial merit. Much greater emphasis needs to be given to investing in the actual process of business change management, attraction of new skills and experience from inside and outside the industry, creation of commercial culture, development of incentivised pay structures and so on.

Similarly, **structural separation of railway infrastructure from rail operations cannot of itself improve business performance.** It may, in the short-term, impede it by becoming too narrow a focus of reform and delaying the business culture and process changes, in both infrastructure and operations, which will actually improve asset and labor utilization. If separation is favored it needs to be followed closely by rigorous business plans in both infrastructure and train operating companies to improve performance.

Third, the ECA region is large and diverse and **one structural model is unlikely to be best fit for all parts of it.** In particular, for those railways which are very small, low density operations a preoccupation with structuring into very small infrastructure and operating units appears to be a misplaced priority when survival depends on a combination of aggressive cost-cutting and agile marketing.

Fourth, **rail reform is not a 'fire and forget' process.** The governments of the region wish to retain ownership of large parts of the industry. But if they are to be effective owners

they need to establish their own mechanisms properly to ensure proper industry governance and supervision, to agree challenging business plans, monitor achievement and take action to hold management accountable for performance.

Fifth, **ownership does matter.** Around 99 percent of total rail traffic in the region continues to be carried by state-owned entities and there is need and scope for much more private participation in core transport operations. The experience of private management has so far vindicated the Estonian Government's approach. It is the only railway in the ECA region which can yet be said to display a clear commercial focus, and its performance is improving on nearly all criteria. The most promising place to attract the private sector into core activity is in rail freight operations. Governments in most ECA countries are committed to ownership of the railway infrastructure network, and also have a clear social and close political interest in passenger services. But there is no obvious reason why ECA Governments should feel a need to be in the business of hauling goods in competition with an aggressive road trucking industry. Nevertheless 26 out of 27 of them continue to do so.

Those countries which have embraced third party access for freight train operators while retaining state-owned rail freight companies may have created a serious policy disconnect. It is difficult for a publicly-owned freight company to be fully competitive against private train operators in markets which are notable for the need for maximum corporate agility. Trying to do so will probably lead to increasing losses to the state company (as the newcomers cherry-pick the best traffics), declining company value, and problems in trying to divest at a later stage. A more practical course, still open to most countries in the region, would be to privatize existing freight operations while they still have value, ahead of giving track access rights. Then introduce those rights after a defined period which will allow the newly privatized company to get its house in order ready for the competition.

Sixth, for most railways in the region, **railway reform will not necessarily mean stand-alone profitability.** Four of the high reformers (Bulgaria, Hungary, Poland and Romania) have modest average traffic intensity and a high component of passenger service; they will require substantial levels of budgetary

support for the foreseeable future both for investment and support of passenger services. In most European circumstances, railway passenger transport is not independently commercially viable in the sense that it is able to cover the full costs of infrastructure. Provision of a comprehensive national passenger rail service is an issue of public policy choice. But public finance constraints dictate that much of the ECA region simply does not have the income level to support the level and coverage of passenger rail service which is currently offered.

Finally, **markets themselves will not stand still**. Competition from other modes will increase in all transport markets in the ECA region. New transport needs will emerge with economic transition and development. Railway reforms are therefore chasing a moving target. The objective of rail reform should not be to achieve a given end-state but to create an industry which is itself capable of future adaptation to markets without constant policy intervention.

Over the next few years (say, to end 2007), there are likely to be a number of further developments in railway reform and private sector participation.

10.3 Scope for Further Commercialization under State Ownership

Public ownership and operation of national railway networks is a legitimate public policy choice: indeed the most common choice made by governments around the world. It is also the choice overwhelmingly favored by current governments in the ECA region, mirroring their neighbors in the EU. It is not anticipated that any other country in the region will follow Estonia's lead and privatize its core public railway network. Moreover, privatization or concessioning of train operations that are currently state-owned is likely to be limited to a few specific cases (such as those indicated below) if only because the necessary policy decisions would already have needed to have been made for there to be a high chance of implementation over the next three years.

Most railway reform measures over the next three years will therefore involve further commercialization under state-ownership. 'Lines of business' are emerging as harder, more focused business entities, whether as divisions, subsidiaries or separate entities. Business processes and accounting methods are slowly getting better, and business and

investment planning more realistic. Second waves of labor restructuring are occurring or are likely to occur. It is likely that total employment in the railway industry in the ECA region as a whole will fall by at least 12 percent, or around 300,000, over the next three years. Regional passenger services will be increasingly separated into new business entities: more of their finance will come from regional/local governments and some will be concessioned (see below). A few of the most grossly uneconomic low-density branch lines may be divested in a few countries of central and south-eastern Europe where some rationalization is desperately needed. However, taken as a whole, the region is unlikely to cut back the network significantly as the political will to do so is likely to be as lacking as it has been in western Europe.

While those railways which are in the 'high' and 'medium' categories of reform are likely to continue commercializing their operations it may also be expected that some of the medium reform countries will become high reformers. Russia, Georgia and Latvia seem likely to do so. Of the low reformers, some such as Turkey, Macedonia, Moldova and maybe one or two others plan to accelerate reform. Whether they do will depend on political support and committed management.

However, taken as a whole, it seems to the author improbable that the aggregate financial dependence of the sector on public funding will diminish. The levels of public funding for passenger services and the capital assets they use do not at this time come close to matching their actual cost. It is unlikely that governments will permit their national railways to make the radical cut-backs in passenger network or services which would be necessary substantially to reduce those costs, nor to embrace either the political stress, or transfer of passengers to road, which would follow from real passenger fare rises big enough to make a budgetary difference. However, it is likely that the mechanism for public funding in the new EU member countries may improve, based on the EU's new Public Services Contract model.

10.4 Private Sector Participation

It appears likely that at least a few major privatizations will occur in the next three years. PKP Cargo (Poland) and CFR-Marfa (Romania) are the most likely candidates. Other new member states of the EU may also move toward this as the policy disconnect referred to above, between access rights and

state ownership of rail freight, will become more evident. Such policies would be likely to be accelerated if one of the major EU public rail freight operators, such as Germany's Railion (previously DB Cargo), were to be privatized, which at least seems possible.

It is likely that some more branch lines and some regional passenger services will be concessioned to the private sector: in Poland, Romania, Slovakia and the Czech Republic policy and circumstance combine to make such solutions more likely.

By contrast, it is unlikely in a three year time horizon, that there will be any significant privatization of existing state-owned train operations in the 'big-three' ECA railways of Russia, Ukraine and Kazakhstan, nor elsewhere in Central Asia.

Private participation in train operations is therefore more likely to come through third party freight operators exploiting track access rights in a number of countries throughout the region. In the immediate future these are more likely to be niche players but they will chip away at market share and bring some much needed contestability into the sector. Perhaps the biggest question mark concerns Russia which has a huge rail freight market which could encourage and withstand many large rail freight operations. Many aspirant companies have been licensed. If stated government policies are translated into a benign track access regime the growth of private freight train operations could dwarf private sector freight development in other parts of the ECA region.

With the possible exception of Poland's inter-city services, private entry into core passenger services appears far less likely. It would require there to be clear mechanisms for extending to new passenger operators some of the subsidies currently enjoyed by the public operators. Few, if any, countries in the region seem likely to have in the next three years policy framework, legislation or implementation mechanisms which would allow this to happen in any way which might be considered secure by private investors.

Private management contracts in core public railway infrastructure and operations in the region are currently negligible and likely to remain that way for the foreseeable future. However, privatization of non-core maintenance and support businesses is set to continue with new program of divestments

planned in Turkey, Croatia, Russia, Uzbekistan and others. By the end of the period, heavy overhaul and repairs of rollingstock in many countries will be sourced from private suppliers and major infrastructure renewals and repairs sourced from private contractors. Use of private sector for routine maintenance of either rollingstock or infrastructure seems a lot less likely as railway managements typically consider these activities to be safety critical and to constitute core internal competences.

Rollingstock leasing is likely to be a growth area for the private sector in some countries, though starting from a very low base. The early large traffic downturns associated with economic transition in the region led to a dramatic and justified reduction in renewal of locomotives and rollingstock as there was clear surplus capacity in the existing fleet. However, as this hiatus endured, so the average age of stock increased and its quality increasingly diverged from modern standards. There is now a shortage of good quality locomotives and rollingstock throughout the region, and in both passenger and freight markets. However, the most pressing need to renew fleets has occurred in Russia, Kazakhstan and the Baltic countries to handle the freight traffic recovery associated with the resources boom

Private freight wagon ownership is therefore increasing rapidly in the Russian railway system (see section 4.3). This is set to continue, though high demand relative to local capacity is pushing up prices of new stock. Direct acquisition by rail shippers is one cause. But private Russian freight forwarding companies will increasingly offer rollingstock in connection with transport service. Emerging wagon leasing companies (including both finance and operating leases) will also create new capacity for shippers. Locomotive leasing is now also emerging as an option for private users in Russia.

By contrast, in most of the ECA region, most potential demand for rollingstock is from loss-making state-owned railways. Their lack of independent creditworthiness is the main factor holding back the development of a larger leasing market. Governments are understandably reluctant to guarantee such arrangements. It seems unlikely that the market will develop fully in such countries until the public funding of railways is put on a more secure and long-term basis (such as through Public Service Contracts) sufficient to give leasing companies the confidence to deal.