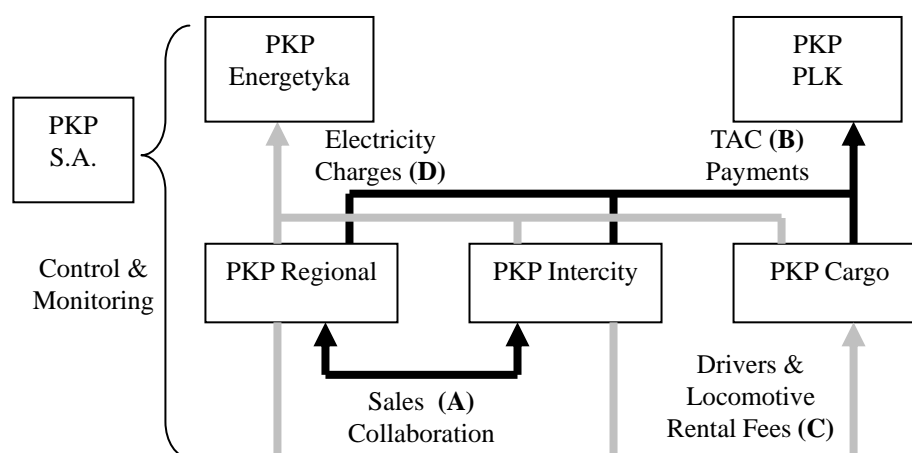


## CHAPTER 3 FINANCIAL ANALYSIS: ITS ISSUES AND PERSPECTIVES

### 3.1 GENERAL OUTLOOK OF RELATIONSHIPS AMONG PKP GROUP COMPANIES

Figure 3.1.1 shows a simplified trade flow among PKP group companies.



**Figure 3.1.1 Simplified Trade Flow**

The relationship shown in Figure 3.1.1 is summarised by the income statement of each company as described in Table 3.1.1.

**Table 3.1.1 Simplified Incomes Statements (2002)**

(Unit: Millions PLN)

Income Statements	PKP Regional	PKP Intercity	PKP Cargo	PKP PLK
(Operational Revenue)				
Passengers & Freights etc	1,749	669	5,923	2,797
<b>Sales of Other Operator's Ticket (A)</b>	<b>279</b>	<b>120</b>	-	-
Government	460	25	-	-
Others	116	2	58	21
Operational Revenue Total	2,604	816	5,981	2,818
(Operational Costs)				
Personnel Costs	653	50	1,630	1,380
<b>TAC to PKP PLK (B)</b>	<b>793</b>	<b>212</b>	<b>1,645</b>	-
<b>Rental Costs to PKP Cargo (C)</b>	<b>475</b>	<b>48</b>	-	-
Other Outsourcing Costs	361	140	894	785
<b>Energy &amp; Material Costs (D)</b>	<b>548</b>	<b>86</b>	<b>835</b>	<b>316</b>
Depreciation Costs	61	59	345	542
Other Operational Costs	474	135	312	650
<b>Sales of Other Operator's Ticket (A)</b>	<b>279</b>	<b>120</b>	-	-
Operational Costs Total	3,644	850	5,661	3,675
(Operational Income)	-1,040	-33	320	-857
Interest Payments	7	0	40	40
Net Income	-1,045	-33	152	-895

## 3.2 PKP S.A.

### 3.2.1 General outlook of financial status

Table 3.2.1 shows simplified balance sheets of PKP S.A. in the fiscal year 2002.

**Table 3.2.1 Balance Sheets of PKP S.A. in FY 2002**

(Unit: Million PLN)

Items	Figures	Items	Figures
(Fixed Assets)		(Capital)	
<b>Tangible Assets</b>	<b>6,398</b>	Capital	10,000
<b>Subsidiaries</b>	<b>4,478</b>	Paid in Capital	1,731
<b>Lease Assets to PLK etc.</b>	<b>8,742</b>	Deficit	- 960
<b>Others</b>	<b>1,130</b>	<u>Total</u>	<u>10,771</u>
<u>Total</u>	<u>20,748</u>	(Liability)	
		Allowance for Pension Costs	193
(Current Assets)		<b>Long-Term Loans</b>	<b>2,163</b>
Materials	86	<b>Short-Term Loans</b>	<b>1,368</b>
Account Receivable	929	<b>Corporate Bonds</b>	<b>938</b>
Others	472	<b>Public Liability</b>	<b>2,717</b>
<u>Total</u>	<u>1,487</u>	<b>Others</b>	<b>714</b>
		<b>Inter-Periodical Settlements</b>	<b>3,372</b>
		<u>Total</u>	<u>11,464</u>
Assets Total	22,235	Capital and Liability Total	22,235

The most significant point in the financial status of PKP S.A. is the fact that PKP S.A. holds a huge value of assets and liabilities. The book value of the assets and liabilities amounted to 22.2 billion PLN and 11.4 billion PLN respectively at the end of the fiscal year 2002. Even so, one of the biggest problems is that PKP S.A. does not have enough resources to repay all of its liabilities. This is because most of the assets held by PKP S.A. cannot be easily liquidated for the repayments of the debts because of their structural problems. In order to resolve this problem, PKP S.A. has to restructure its assets and debts.

### 3.2.2 Debt restructuring

Table 3.2.2 shows a list of PKP S.A.'s liabilities at the end of the fiscal year 2002.

**Table 3.2.2 Debt Structure of PKP S.A. (Unit: Billion PLN)**

Loans and Corporate Bonds	Public Liabilities	Other Liabilities	Inter-periodical Settlements*	Total
4.5	2.7	0.7	3.4	11.4

\* This item includes liabilities that are not accompanied by cash outflow.

Source: 'Financial Statement'

#### (1) Loans and corporate bonds

The effectiveness of the Law on Commercialization Restructuring and Privatization of PKP (hereinafter referred to as New PKP Restructuring Law) will enable PKP S.A. to issue corporate bonds with a governmental guarantee. Thus PKP S.A. is now planning to issue an additional 1.2 billion PLN of corporate bonds. Moreover, PKP S.A. is now planning to borrow 0.7 billion PLN from commercial banks. The cash raised from the additional bonds and loans is planned to be used for the repayment of short-term

liabilities, providing financial support for PKP Regional, which is in an aggravated financial position, and so on. It should be noted that the Ministry of Finance (hereinafter, MOF) guarantees the repayments of the credits and the debentures of PKP S.A. The major assets of PKP S.A., like the stocks of the train operating companies, are now under the supervision of MOF as pledges and mortgages of the guarantees.

There are two main problems about the funds raised by loans and corporate bonds. One is the difficulty of calculating how much money is necessary to financially support PKP Regional. The other is that there are certain periods when PKP S.A. needs huge funds to repay loans and bonds. To prepare for those periods, PKP S.A. has to make a cash flow plan that takes into consideration the total cash flows of all companies in the PKP group.

## (2) Public liabilities

A part of the public liabilities, which amounted in total to approximately 2.7 billion PLN at the end of the fiscal year 2002, can be exempted or suspended based on the New PKP Restructuring Law and Act Dated 30th August 2002 on Restructuring Some Public and Legal Liabilities from Entrepreneurs (hereinafter referred to as General Restructuring Law). The public liabilities include payments to the state social insurance fund and the state fund for the rehabilitation of disabled people, VAT payments and so on.

This part of the public liabilities, amounting to approximately 1,650 million PLN, can be exempted from the total liabilities of PKP S.A. by these regulations. This treatment can enormously lessen the financial burden of PKP S.A.

### 3.2.3 Asset restructuring

Table 3.2.3 shows a list of PKP S.A.'s assets at the end of the fiscal year 2002.

**Table 3.2.3 Contents of Assets**

Assets transferred in the form of contributions:	4,478 million PLN
Real estate under PKP S.A.'s supervision:	6,398 million PLN
Railway lines leased to PKP PLK etc:	8,742 million PLN
Others:	2,617 million PLN

Source: Financial Statement

#### (1) Assets transferred in the form of contributions

The assets transferred to the subsidiaries in the form of contributions can be liquidated by selling the stocks of the subsidiaries. The assets transferred in the form of contributions are as follows.

- coaches and electric multiple units were transferred to PKP Regional
- locomotive hauled coaches were transferred to PKP Intercity
- wagons and locomotives were transferred to PKP Cargo
- back-ups (spare parts) were transferred to PKP Cargo and PKP Regional

- other tangible assets and tangible assets of low value.

The largest privatization is of PKP Cargo, which is expected to produce funds of more than 2.5 billion PLN. The success of the financial restructuring of PKP group heavily relies on whether or not the privatization of PKP Cargo can be completed. Other train-operating companies also have important roles in the financial restructuring of the PKP group. It is imperative that the financial status of those train-operating companies be improved or maintained for the sake of the financial restructuring.

## **(2) Fixed assets under PKP S.A.'s supervision**

The main assets under the supervision of PKP S.A. are land and buildings, which amount to 2.3 billion PLN and 3.4 billion PLN respectively. Some of this land is subject to property right disputes due to the lack of the evidence that can prove that PKP S.A. is the legal owner.

Some of the assets cannot be sold even after legal status is settled because those assets are desperately needed for the railway business of Poland. However, the other assets can be utilized for use by other businesses, which can contribute to repaying the debts of PKP S.A. Therefore, it is expected to speed-up the procedures to settle the legal problems of those assets.

At present, there is a plan to sell real estate over the years from 2002 to 2006, of which total value amounts to approximately 856 million PLN. A part of those assets were sold in 2002 at the total price of 201 million PLN. However, the revenue from selling that real estate can become only a small portion of the financial resources for repaying the debts. On the other hand, efforts made to redevelop some of the under-utilised real estate would be rewarded by the creation of enormous financial resources for the repayment of debts.

## **(3) Railway lines leased to PKP PLK etc**

According to the New PKP Restructuring Law, PKP S.A. can give railway track and land with undisputed legal status to PKP PLK in the form of a contribution in kind. Note that some railway tracks and lands also have property rights problems. PKP PLK estimated that in order to manage railway lines with a total length of 23.5 thousand km, they need to have approximately 55 thousands lots of land, which is only 75 % of all PKP S.A. land area holdings. As a temporary solution, the lands without settled legal status could be leased to PKP PLK etc until the legal status is settled.

In the New PKP Restructuring Law, there is a special treatment, which makes it easier for PKP S.A. to settle the property rights problems. The process could be speeded-up by implementation of appropriate legal regulations. After the effectiveness of the New PKP Restructuring Law, PKP S.A. can settle the property right problems without ownership registrations, thereby making it easier to determine property rights

## **(4) Relationship with debt restructuring**

PKP S.A. must conduct asset restructuring with the requirements for debt restructuring in mind. The main problems in relation to the restructuring are as follows.

- 1) PKP S.A. cannot repay all the debts by itself. The debts of approximately 1.2 billion PLN have to be repaid with governmental support.
- 2) The privatization of the subsidiaries is expected to produce the largest sources of repayments. Therefore, failures in the privatizations will immediately ruin the cash flow plan.
- 3) Potential extra financial support for PKP Regional might force PKP S.A. to change the cash flow plan.

If PKP S.A. cannot obtain enough resources to repay all the debts through the privatization, MOF will dispose of the pledged and mortgaged assets to compensate for the losses caused by the guarantee, with little consideration about the future of the railway business in Poland. This is because the most important agenda for MOF is to avoid financial losses of the Treasury of Poland rather than to improve the railway business in Poland. Because of this, it is possible that the deterioration of the railway business in Poland may come earlier than the deterioration of the rolling stock and infrastructure.

In terms of 1) above, it is necessary for PKP S.A. to make efforts to increase the financial resources for repayment of the debts. In order for that, the assets with low utilisation, such as marshalling yards, have to be redeveloped. In terms of 2) and 3) above, the financial status of each subsidiary has to be improved as necessary. The results of financial analysis and recommendations are described in the chapter dealing with each train operating company.

### **3.3 PKP PLK**

#### **3.3.1 General outlook of financial status**

Table 3.3.1 and 3.3.2 show the simplified financial statements of PKP PLK in the fiscal year 2002. The fiscal year for 2001 was from October to December. Therefore, the figures used in the income statement for FY 2001 have been calculated by quadrupling the actual figures.

**Table 3.3.1 Incomes Statement of PKP PLK in FY 2002**

(Unit: Thousand PLN)

Items	FY 2001	%	FY 2002	%
<b>Operational Revenue (1)</b>	<b>3,297,197</b>	<b>100.0</b>	<b>2,797,038</b>	<b>100.0</b>
<b>Operational Costs (2)</b>	<b>3,489,092</b>	<b>105.8</b>	<b>3,108,986</b>	<b>111.0</b>
(3) = (1) – (2)	- 191,895	-5.8	- 311,949	- 11.0
Other Operational Revenue (4)	3,428	0.1	21,392	0.8
<b>Other Operational Costs (5)</b>	<b>*488,295</b>	<b>14.8</b>	<b>566,446</b>	<b>3.5</b>
(6) = (3) + (4) – (5)	- 676,762	-20.5	- 857,001	- 13.5
Financial Revenue (7)	4,506	0.1	5,112	0.2
Financial Costs (8)	6,471	0.2	39,937	1.4
(9) = (6) + (7) – (8)	- 678,726	-20.6	- 891,826	- 15.1
Other Losses (10)	1,747	0.1	2,911	0.1
<b>Net Profits (11) = (9) – (10)</b>	<b>- 680,473</b>	<b>-20.6</b>	<b>- 894,738</b>	<b>- 15.2</b>

\* The other operational costs in FY 2001 include special bonuses for the employees with long services, which amounts to 238 millions PLN. This amount is not quadrupled for the comparison between 2001 and 2002.

**Table 3.3.2 Breakdown of Operational Costs**

(Unit: Million PLN)

Items	FY 2001	%	FY 2002	%
Wages & Allowance	1,398	40.1	1,380	44.4
Outsourcing Costs	829	23.7	785	25.3
Depreciation Costs	750	21.5	542	17.4
Energy & Material Costs	439	12.6	316	10.2
Tax	47	1.3	47	1.5
Others	27	0.8	37	1.2
Total	3,489	100.0	3,108	100.0

According to the income statement, the operational revenues could not cover the operational costs and PKP PLK produced operational losses. Furthermore, PKP PLK suffered a loss caused by a write-off of the credits to PKP Regional in the fiscal year 2002. However, based on the study so far, these problems may in practice originate from the business structure of PKP group.

### 3.3.2 Operational costs

#### (1) Influence on TAC

Train operating companies in Poland expect PKP PLK to change the Track Access Charge (hereinafter, TAC) system because, as stated below, if there is business inefficiency in PKP PLK it may influence the other train operating companies through TAC. Therefore, eliminating the business inefficiency of PKP PLK is a crucial issue for the train operating companies in Poland.

At present, the rate of TAC is determined by operational costs in previous years divided by expected train kilometers, and takes into consideration other factors. Since PKP PLK calculates the amounts of the operational costs based on the actual ones in previous years, the business inefficiency of PKP PLK could be included in TAC.

#### (2) Cost analysis

Approximately 70 % of the costs are personnel costs and outsourcing costs. According

to the analysis of the cost structure of PKP PLK, it is necessary to cut the personnel costs and the outsourcing costs through the rationalization of PKP PLK in order to effectively reduce the rate of TAC.

The depreciation costs are calculated by a straight-line method. The main fixed assets are railway lines and infrastructure management systems, and those assets incur approximately 90 % of the depreciation costs. The depreciation costs are reflected in TAC rates, which are expected to cover the costs for infrastructure replacement.

The assets were revalued at the time when PKP PLK was established. However, most of the assets had already been obsolete at the time of the revaluation. Therefore, the depreciation costs based on the current book value are too low to cover the replacement costs and the current infrastructures cannot be replaced automatically through depreciations and TAC. In order to regain the initial level of the infrastructure, governmental support is necessary.

### 3.3.3 Necessity of restructuring PKP PLK

At present, PKP PLK has account receivables from PKP Group companies, including PKP Regional, PKP Intercity and PKP Cargo. Table 3.3.3 shows the current situation (December, 2002) of TAC payments of the main train companies.

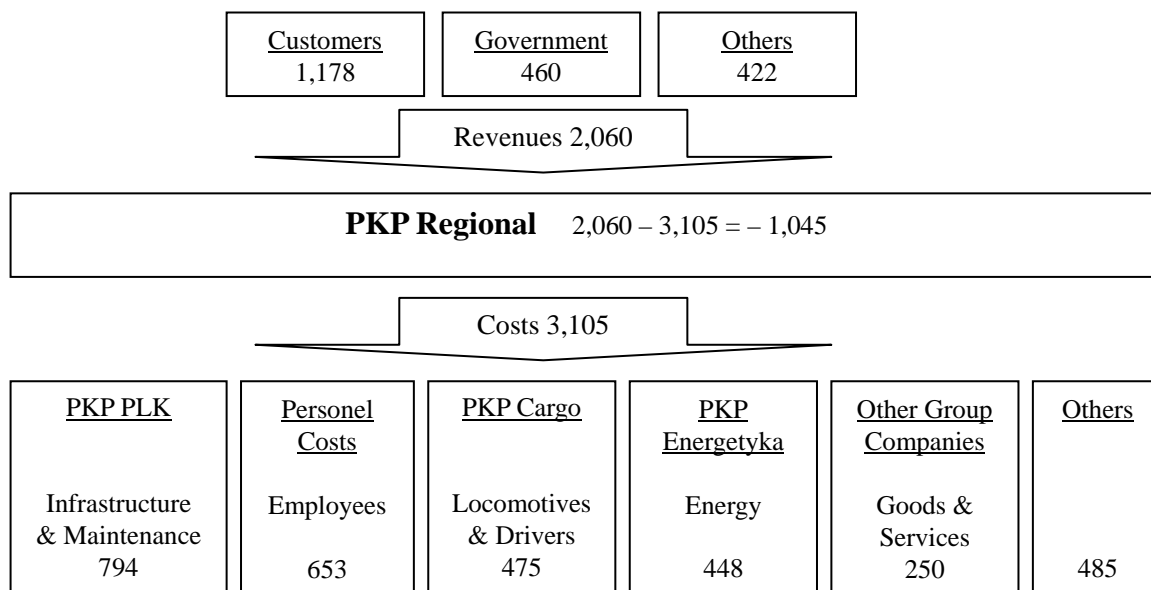
**Table 3.3.3 TAC Credits of PKP PLK**

Company Names	(1) Amounts of Debts	(2) Monthly Payments	(1)/(2)
<b>PKP Regional</b>	<b>707 Million PLN</b>	<b>80 Million PLN</b>	<b>9.0 Months</b>
PKP Cargo	294 Million PLN	160 Million PLN	1.8 Months
PKP Intercity	82 Million PLN	21 Million PLN	3.9 Months

However, due to the aggravated financial situation of PKP Regional, TAC payments of PKP Regional are extremely overdue. In the fiscal year 2002, a part of the accounts receivable to PKP Regional (461 million PLN) was written off.

Delinquency of TAC payments might cause cash shortages for PKP PLK itself, which might lead to lack of railway infrastructure maintenance. However, it should be noted that this problem is caused by the Regional Transportation System of Poland rather than the company, PKP Regional.

The Regional Transportation System includes the Polish government, PKP regional, PKP PLK, PKP Cargo and so on. Figure 3.3.1 shows the simplified trade flow of the Regional Transport System based on the financial data of PKP Regional in the fiscal year 2002.



**Figure 3.3.1 Trade Flow of Regional Transportation System (Unit: Million PLN)**

Based on Figure 3.3.1, PKP Regional cannot maintain fiscal balance and created a more than 1,000 million PLN loss in the fiscal year 2002. Even if PKP Regional dismissed all of its employees, it could save only 653 million PLN, which is smaller than the losses made by PKP Regional. This suggests that the entire Regional Transportation System of Poland may be generating unnecessary costs such as excess personnel costs, infrastructure maintenance costs, locomotive maintenance costs and so on. In particular, PKP PLK may have a large excess personnel and infrastructure from the point of view of the entire Regional Transportation System. Restructuring PKP PLK is desperately needed in order to restructure the Regional Transportation System. If this restructuring is not implemented, the unnecessary costs may erode business resources that are necessary to maintain and develop indispensable infrastructure and human resources for the railway business in Poland.

### 3.3.4 Budgetary inspection by independent organization

The New Transportation Law determines the responsibilities of the president of UTK, which includes the approval and coordination of TAC. However, the approval and supervision is limited to an the investigation of whether or not TAC calculation accords with the rules and does not include an investigation that verifies whether or not business inefficiency is included in TAC.

In order to prevent the business inefficiency of PKP PLK from influencing the train operating companies, PKP PLK has to set TAC based on its annual budgets. In addition, the adequacies of those annual budgets have to be inspected by an independent organization. This budgetary inspection can contribute to the reduction of TAC through the rationalization of PKP PLK. Furthermore, when the government has to subsidize PKP PLK to cover operational costs, this budgetary inspection can also contribute to reducing the amounts of subsidies.



### 3.3.5 Corporate bonds and credits

PKP S.A.'s loan from EIB is used to modernize the railway infrastructure leased to PKP PLK and is expected to be repaid by PKP PLK. In addition, PKP PLK is now planning to raise funds from loans or corporate bonds with governmental guarantees. It should be noted that these funds raised by loans and corporate bonds are accompanied by interest payments that will be reflected in TAC. Governmental support for new investments is desperately needed, in order to lessen the financial burden of the train operating companies,

## 3.4 PKP REGIONAL

### 3.4.1 General outlook of financial status

Table 3.4.1 and 3.4.2 show the simplified financial statements of PKP Regional in the fiscal year 2002. The fiscal year 2001 was from October to December. Therefore, the figure of the income statement in FY 2001 has been calculated by quadrupling the actual figures.

**Table 3.4.1 Incomes Statements of PKP Regional in FY 2002**

(Unit: Thousand PLN)

Items	FY 2001	%	FY 2002	%
Operational Revenue (1)	2,034,620	100.0	2,209,116	100.0
<b>Operational Costs (2)</b>	<b>3,520,346</b>	<b>173.0</b>	<b>3,221,734</b>	<b>145.8</b>
(3) = (1) – (2)	-1,485,727	-73.0	- 1,012,618	- 45.8
Other Operational Revenue (4)	3,863	0.2	116,410	5.3
Other Operational Costs (5)	62,293	3.1	144,144	6.5
(6) = (3) + (4) – (5)	-1,544,156	-75.9	- 1,040,352	- 47.1
Financial Revenue (7)	7,573	0.4	13,389	0.6
Financial Costs (8)	5,789	0.3	15,735	0.7
(9) = (6) + (7) – (8)	-1,542,373	-75.8	- 1,042,698	- 47.2
Other Losses etc. (10)	8	0.0	2,273	0.1
<b>Net Profits (11) = (9) – (10)</b>	<b>-1,542,380</b>	<b>-75.8</b>	<b>- 1,044,971</b>	<b>- 47.3</b>

**Table 3.4.2 Breakdown of Operational Costs**

(Unit: Million PLN)

Items	FY 2001	%	FY 2002	%
<b>Outsourcing Costs</b>	<b>1,982</b>	<b>56.3</b>	<b>1,629</b>	<b>50.6</b>
<b>Energy &amp; Material Costs</b>	<b>585</b>	<b>16.6</b>	<b>548</b>	<b>17.0</b>
Wages and Allowance	608	17.3	653	20.3
Depreciation	245	7.0	61	1.9
Tax	15	0.4	21	0.7
Others	85	2.4	309	9.6
Total	3,520	100.0	3,222	100.0

According to its income statement, PKP Regional has a huge deficit that was mainly caused by its huge operational costs that amounted to 3,222 million PLN. The largest costs are outsourcing costs and energy costs, most of which are provided by PKP group companies. As mentioned in the previous chapter, it is clear that the huge operational costs are not only a matter for PKP Regional but also a matter for the PKP group companies.

### **3.4.2 Unprofitable train operations**

#### **3.4.2.1 Present conditions of unprofitable train operations**

At present, unprofitable train operations of the Regional Transportation System are making huge losses for PKP Regional. A part of intra-voivodship trains are operated based on the contracts between PKP Regional and voivodship. However, PKP Regional could not receive enough compensation from those contracts. Moreover, out of the rest of the trains without contracts, approximately 3 % of train operations of PKP Regional are profitable. PKP Regional planned to abolish some one thousand unprofitable trains, but after considerable protests and negotiations, was able to withdraw only 116 of these. These unprofitable train operations cause the financial problems of the Regional Transportation System.

##### **(1) Fund availabilities to voivodship**

Contracts between PKP Regional and voivodships are funded by the subsidies from the central government to voivodships. Precise rules are determined by a governmental ordinance that regulates how to distribute governmental budgets to each targeted voivodship. The way to distribute governmental budgets is based on data about population, length of the active railroads and the situation of unemployment in each voivodship.

However, the amounts of subsidies from the central government to each voivodship are determined regardless of the costs needed to operate regional transportation systems. Therefore, those amounts are not enough to compensate the actual necessary costs.

##### **(2) Possibility of another obstacle**

New legislation will make another obstacle in the termination of unprofitable train operations. Due to an inadequate description in Legal Act on March 28<sup>th</sup>, 2003 on Railway Transportation (hereinafter referred to as Railway Transportation Law), it may come to be virtually impossible for PKP Regional to terminate unprofitable train operations.

In Article 41 of Railway Transportation Law, there is a rule determining the cases that voivodships can refuse to consent to the discontinuation of transport services within the public service obligation. Such cases can include those situations in which the voivodship fails to select another railway transport carrier. However, since it is hard to find alternative operators because those train operations are basically low-density and unprofitable, this rule may make it very difficult for PKP Regional to terminate the operation of unprofitable train operations.

Though this article does not aim at forcing PKP Regional into the irrational obligation as a matter of course, the wording of the article may prevent PKP Regional from terminating unprofitable train operations.

#### **3.4.2.2 Basic conditions requiring change in the Regional Transportation System**

### **(1) Necessary changes in the law**

There are two changes necessary in the regulations. One is to change Article 41 of the Railway Transportation Law, which stipulates that PKP Regional cannot terminate unprofitable train operations. In order to avoid the same kinds of regulatory problems, it is desirable to consider ways of stipulating the regulations more prudently when establishing or revising legislation.

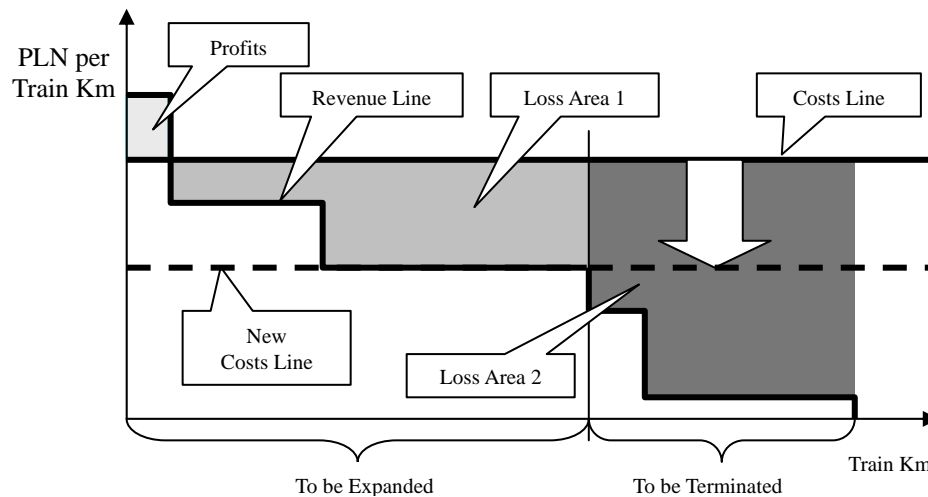
The other is to change the subsidy system so that other transportation modes, such as buses and taxis, can engage in the Regional Transportation System. At present, it is assumed that the railway business is the only mode of transportation for the Regional Transportation System. However, it may be more efficient to use the funds for other transportation modes rather only for subsidizing the operational costs of PKP Regional.

It should be noted that Law on Income of Local Government Units (hereinafter referred to as New Voivodship Financing Law) has been prepared. The concept of this law is decentralization of the governmental functions. Under this law, each voivodship can get funds by independent taxation instead of being tied to subsidies from the central government. Tied subsidies to be abolished by the New Voivodship Financing Law include the subsidies for the regional railway business. After the New Voivodship Financing Law goes into effect, voivodships can spend the additional funds from the tax as they like. These additional funds can be spent for other transportation modes or other communal services.

In this case, there is the risk that PKP Regional may have to operate unprofitable train operations without any money from voivodships while the voivodships spend additional funds for other transportation modes or other communal services. In order to avoid such a situation, Article 41 in the Railway Transportation Law has to be changed.

### **(2) Way to terminate losses from unprofitable train operations**

Cutting unprofitable train operations is necessary in order to eliminate losses. However, cutting every unprofitable train operation would cause huge financial damage to companies that are now involved in the Regional Transportation System. In order to limit such damages, the train kilometers of profitable train operations should be expanded while the train kilometers of unprofitable train operations are reduced. Figure 3.4.1 illustrates this concept.



**Figure 3.4.1 Process to Eliminate Losses**

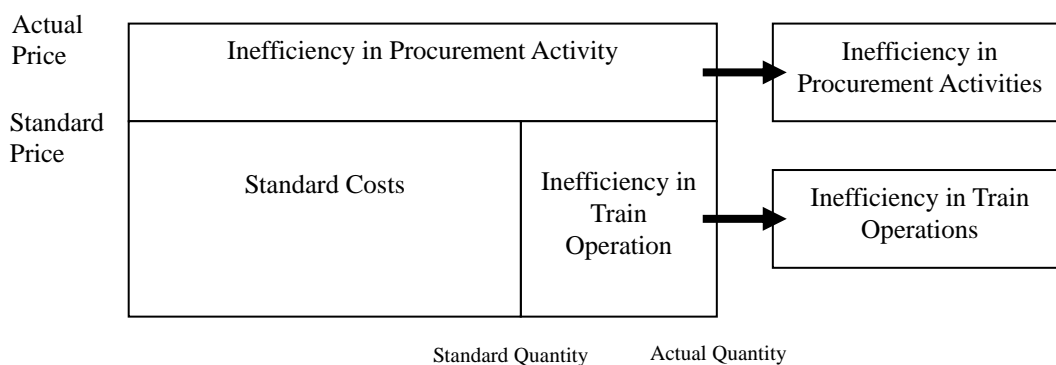
In Figure 3.4.1, the train operations, which produce the Loss Area 1 can survive through the improvement of the productivity of the Regional Transportation System. There are two points to be noted. One is that this improvement of productivity has to be achieved by not only PKP Regional but also the participants in the Regional Transportation System. In order for that to happen, PKP Regional has to obtain the ability to estimate reasonable costs of the main goods and services provided by each company and set a target cost line. The other is that the improvement of productivity is urgent because the open access policy gives other train operators the chance to exploit the profitable or potentially profitable train operations.

The train operations that produce Loss Area 2 have to be suspended if they are not supported by the voivodships. Conversely, resources that had been used for the train operations in the Loss Area 2 can be used to expand profitable or potentially profitable train operations.

Once PKP Regional sets a target cost line, the group companies that engage in the Regional Transportation System will be expected to make efforts to achieve the new-targeted cost line. PKP Regional has to make efforts to expand profitable train operations by channeling the business resources into profitable fields.

### **(3) Accounting system**

The accounting system of PKP Regional has to be improved in order to achieve the target cost line explained in Figure 3.4.1. PKP Regional is now planning to establish a new accounting system capable of collecting cost data for each train. After establishing the new accounting system it may be easier to identify unprofitable train operations. It is more desirable for the new accounting system to include the concept of standard costs. Standard costs means expected costs under ordinary circumstances. The difference between standard costs and actual cost may be the inefficiency in the operation. The concept of cost analysis using standards cost is described in Figure 3.4.2.



**Figure 3.4.2 Concept of Standard Cost Analysis**

Based on this new accounting system with the concept of the standard costs, PKP Regional can perceive which points generate business inefficiencies. This means that if service providers to PKP Regional cause business inefficiency in the Regional Transportation System, PKP Regional can negotiate business conditions with those service providers that will lead to improvement of productivity of the Regional Transportation System.

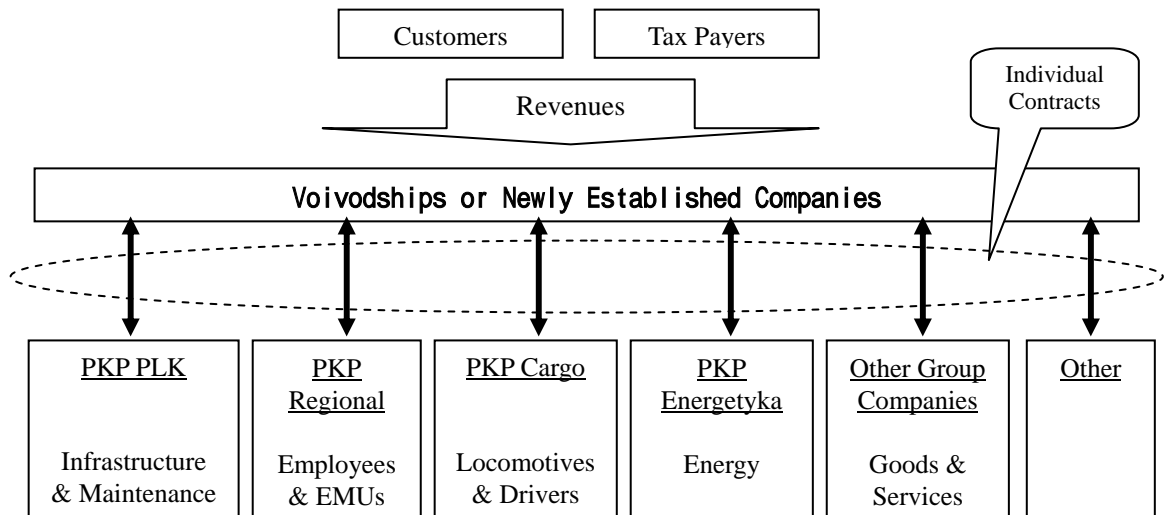
### 3.4.2.2 Ways to treat unprofitable train operations

#### (1) Relationship with voivodships

The relationship between each voivodship and the PKP groups will have to be changed to match the new conditions that will occur when the New Voivodship Financing Law goes into effect.

In the areas where PKP group cannot conduct train operations by itself, it will have to get funds from the corresponding voivodship(s). The PKP group will be expected to compete against other train operating companies, other transportation modes and other communal services in order to get the funds from these voivodships. However, at the present time, only PKP Regional is engaged in negotiating with each voivodship. Therefore, after the New Voivodship Financing Law has gone into effect, if PKP Regional loses competition in one voivodship, that defeat might induce a serial adverse affect on other PKP group companies and the competition in other voivodships. In order to avoid this risk, it is necessary to consider how to disperse risks and burdens that are currently concentrated on PKP Regional.

One possible scheme for dispersing the risks and the burdens of PKP Regional is for PKP Regional to transfer its train operations to voivodships and the voivodships continue the train operations with services provided by each of the PKP group companies. In this scheme, each PKP group company provides its services to an individual voivodship. In such a scheme, PKP Regional would come to function as a rental service company for EMUs and personnel. Figure 3.4.3 illustrates the concepts of this scheme.



**Figure 3.4.3 Trade Flow of Recommended System**

In this scheme, the risks and the burdens can be dispersed among related parties and the related parties have to make efforts to improve their services in order for them to survive. In addition, the voivodships can improve their regional transportation services with their own arrangements.

After the transition of the train operations to voivodship, the voivodships would have to manage train operations by themselves. Therefore, each voivodship would have to build up its own management capacity. The consulting services of PKP Regional should be considered for providing support for this build-up of the management capacity. Furthermore, dispatching staff and contributing assets from PKP group companies are also available, if necessary.

## (2) Case of open competitions

In the areas where PKP group decides to stop train operations due to unprofitability, the voivodships could conduct open competitions to acquire train-operating companies to continue regional passenger services. In this case, PKP Regional can also participate in the competitions as a bidder to get the train operations of which profitability are secured by contracts.

If voivodships were to conduct open competitions, PKP Regional would need to strengthen its competitiveness by improving its productivity so that it could win the competitions. In order to strengthen the competitiveness, all PKP group companies have to improve their productivity according to the targeted cost lines as explained previously. Therefore, it is imperative to build up the capacity for PKP Regional and set the targeted cost lines for PKP group companies that are involved in the Regional Transportation system.

## (3) Consideration of bus operations as alternative to train operations

Using buses instead of trains as alternatives might make it easier for PKP Regional to terminate unprofitable train operations. Based on the data of the contracts that PKP Regional has made with bus operators during emergency situations, the average price per bus km is 2.6 PLN. The costs necessary to operate trains one km are 24.8 PLN in

the fiscal year 2003, or nearly 9.5 times higher than the price of bus operations. If those bus operations can be used as alternatives to train transport, operational costs can be drastically reduced and the termination of unprofitable train operations will become easy.

#### **(4) Summary of ways to treat unprofitable train operations**

Based on the explanation so far, there are five cases as follows.

- 1) Train Operations by PKP Regional without Subsidies
- 2) Termination of Train Operations
- 3) Train Operations by Competition Winners
- 4) Train Operations by Voivodships
- 5) Train Operations by Newly Established Companies by Voivodships

Figure 3.4.4 is a flow chart that illustrates the relationship of the above-mentioned five cases.

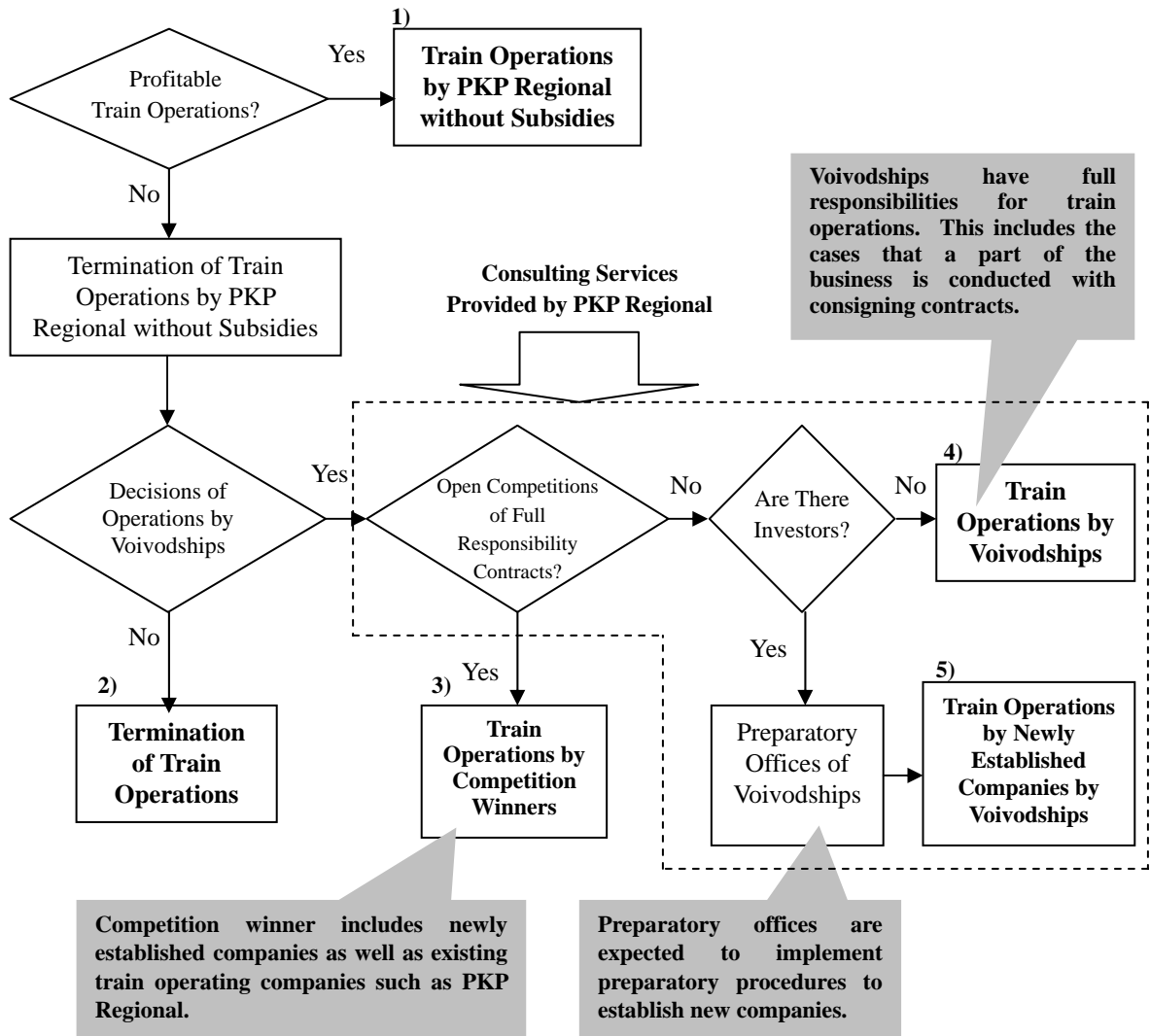


Figure 3.4.4 Flow Chart of Procedures

**(5) Consideration to decrease financial burdens of voivodships**

Theoretically, all the unprofitable train operations have to be suspended or transferred to voivodships. However, excessive financial burdens on the voivodships may prevent the unprofitable train operations from being smoothly transferred to the voivodships. Therefore, it should be considered that the unprofitable trains, of which losses can be covered by the profitable train operations of PKP Regional, continue to be operated by PKP Regional in order to reduce financial burdens of the voivodships.

**3.4.2.3 How to set target revenues & costs lines**

**(1) Suspension of Unprofitable Train Operation by PKP Regional**

Table 3.4.3 and 3.4.4 shows the results of sensitivity analysis that indicates the financial influences of “increase in revenue”, “Cost Reduction” and “Suspension of Train Kilometres”. Changes in each component are described by comparison with the figure in the fiscal year 2002.



In this analysis, it is assumed that the sales per train kilometre increases by 5 % in the short term and 7.5 % in the long term respectively. The costs per train kilometre are assumed to be reduced by 10 % in the short term and 15 % in the long term respectively. The amounts of compensation are losses compensated by the Polish government for the discounted ticket system. It is assumed that the full amounts of the losses are compensated and that the amounts vary according to the sales amounts.

**Table 3.4.3 Sensitivity Analysis 1 (Short Term Scenario)**

Scenario No.	1)	2)	3)
Increase in Revenues	5 %	<b>5 %</b>	5 %
Cost Reduction Rate	10 %	<b>10 %</b>	10 %
Percentages of Train Kilometers Suspended by PKP Regional	40 %	<b>45 %</b>	50 %
Sales (million PLN)	1,274	<b>1,214</b>	1,149
Costs (million PLN)	1,589	<b>1,457</b>	1,325
Profits (million PLN)	-316	<b>-243</b>	-176
Compensations (million PLN)	271	<b>258</b>	245
Final Profits (million PLN)	-44	<b>16</b>	69
Reduction of Total Costs	46.0%	<b>50.5%</b>	55.0%

Cutting costs or the suspension of train operations will contribute to making PKP Regional profitable. However, since it is difficult to reduce the cost and suspend train operations excessively, well-balanced scenarios should be chosen. Based on Table 3.4.3, Scenario 2) is the balanced one.

In the long run, further sales increases and cost reductions can also be achieved by the introduction of new equipment. However, demand is also expected to decrease. Scenarios for the fiscal year 2010 are as follows.

**Table 3.4.4 Sensitivity Analysis 2 (Long Term Scenario)**

Scenario No.	4)	5)	6)
Increase in Revenues	7.5 %	<b>7.5 %</b>	7.5 %
Cost Reduction Rate	15 %	<b>15 %</b>	15 %
Percentages of Train Kilometers Suspended by PKP Regional	55 %	<b>60 %</b>	65 %
Sales (million PLN)	889	<b>825</b>	758
Costs (million PLN)	1,127	<b>1,002</b>	876
Profits (million PLN)	-238	<b>-176</b>	-118
Compensations (million PLN)	189	<b>176</b>	161
Final Profits (million PLN)	-49	<b>0</b>	43
Reduction of Total Costs	61.7%	<b>66.0%</b>	70.2%

Based on Table 3.4.4, PKP Regional can achieve a profit with the least effort by Scenario 5).

Table 3.4.5 shows a summary of the selected scenarios.

**Table 3.4.5 Summary of Scenario 2) and 5)**

Items	Short Term Scenario	Long Term Scenario (2010)
Increase in Revenues	5 %	7.5 %
<b>Cost Reduction Rate</b>	<b>10 %</b>	<b>15 %</b>
<b>Percentages of Train Kilometers Suspended by PKP Regional</b>	<b>45 %</b>	<b>60 %</b>
Sales (million PLN)	1,214	825
Costs (million PLN)	1,457	1,002
Profits (million PLN)	-243	-176
Compensations (million PLN)	258	176
Final Profits (million PLN)	16	0
<b>Reduction of Total Costs</b>	<b>50.5%</b>	<b>66.0%</b>

Based on these scenarios, approximately 50 % of the costs have to be reduced in the short term and approximately 66 % of the costs have to be reduced through increased productivity and the suspension of train operations by the fiscal year 2010. It should be noted that these cost reductions have to be achieved by all of the participants of the passenger transportation services through the use of various methods, including labour restructuring.

### (2) Transition of unprofitable train operations to voivodships

It also should be noted that the successful transfer of train operations to voivodships could decrease the termination of unprofitable train operations. At present, 500 millions PLN annually is expected as a subsidy for the regional passenger transportation services. Table 3.4.6 shows the conditions after the transition of unprofitable train operations to voivodships.

**Table 3.4.6 Conditions after Transitions of Unprofitable Train Operations**

Items	Short Term Scenario	Long Term Scenario (2010)
Percentages of Train Kilometers Suspended by PKP Regional	45 %	60 %
Increase in Revenues	5 %	7.5 %
Cost Reduction Rate	10 %	15 %
<b>Percentages of Train Kilometers to be Suspended</b>	<b>13 %</b>	<b>23 %</b>
<b>Percentages of Train kilometers Operated by Voivodships</b>	<b>32%</b>	<b>37 %</b>
Sales (million PLN)	295	353
Costs (million PLN)	858	931
Profits (million PLN)	-563	-578
Compensations (million PLN)	63	78
Subsidies (million PLN)	500	500
<b>Final Profits (million PLN)</b>	<b>0</b>	<b>0</b>

### (3) Summary of scenarios

Summarized influences of each scenario are described in Table 3.4.7.

**Table 3.4.7 Situations after Transitions of Unprofitable Train Operations**

Items	Short Term Scenario	Long Term Scenario (2010)
(PKP Regional)		
Increase in Revenues	5 %	7.5 %
Cost Reduction Rate	10 %	15 %
<b>Percentages of Train Kilometers Operated by PKP Regional</b>	<b>55%</b>	<b>40%</b>
Sales (million PLN)	1,214	826
Costs (million PLN)	1,457	1,002
Profits (million PLN)	-243	-176
Compensations (million PLN)	258	176
Final Profits (million PLN)	16	0
(Voivodships)		
Increase in Revenues	5 %	7.5 %
Cost Reduction Rate	10 %	15 %
<b>Percentages of Train Kilometers Operated Voivodships</b>	<b>32%</b>	<b>37%</b>
Sales (million PLN)	295	353
Costs (million PLN)	858	931
Profits (million PLN)	-563	-578
Compensations (million PLN)	63	78
Subsidies (million PLN)	500	500
Final Profits (million PLN)	0	0
<b>Percentages of Train Kilometers to be Suspended</b>	<b>13 %</b>	<b>23 %</b>

The following conditions are necessary in order to achieve the above-mentioned scenarios. First is that the Polish central government or voivodships has to maintain same level of budget every year. Second is that all the budgets for the regional passenger transportation services have to be spent for the railway businesses. Third is that, PKP Regional has to provide sound consulting for the voivodships in order for them to achieve the increase in sales and the cost reductions.

Except for the first condition, realising the remaining two conditions relies heavily on the entire PKP group. Therefore, the entire PKP group is expected to put forth huge efforts to realize the second and third conditions.

Precise analysis with technical survey of JICA Study Team shall be described in Table 3.9.1.

### 3.4.3 Internal trade among group companies

#### (1) Problems relating to internal trade within the PKP group

At present, approximately 67 % of operational costs are due to internal trade within the PKP group. Even without TAC, the internal trade represents 40 % of the operational costs. However, PKP Regional does not have the capacity to negotiate the business conditions with its service providers, especially PKP Cargo and PKP Energetyka. This problem is caused by the fact that PKP Regional does not have any department that can estimate the adequate costs of the services to be procured for the regional railway business.

Furthermore, due to internal trade practices, PKP Regional might have to procure goods and services at higher prices than market prices which forces PKP group companies to procure goods and services within PKP group as much as possible as discussed in (3) Internal trade practices below. .

## **(2) Ability of cost estimation**

At present, PKP Regional rents locomotives and drivers from PKP Cargo for the regional railway business. However, the amount for the services that are necessary for the business are not determined by PKP Regional but rather by PKP Cargo. This is because PKP Regional does not have the capability to estimate the necessary number of locomotives and drivers for regional railway services. PKP Regional also does not have the ability to investigate the appropriateness of the claimed amounts of energy costs from PKP Energetyka. The ability of cost estimation is necessary to maintain fair trade among the PKP group companies. Fair trade will contribute to the improvement of the business operation of not only PKP Regional, but also the service providers because the service providers can recognize the inefficiency of the management of their companies and make efforts to improve their business through fair trade.

In addition, the ability for cost estimation can contribute to the establishment of the standard costs mentioned before, which is useful to avoid business inefficiency of PKP Regional. In order to obtain the ability of cost estimation, PKP Regional has to establish departments for cost estimation and provide the necessary human resources and equipment.

## **(3) Internal trade practices**

There is a practice aimed at preventing drainage of the financial resources of the PKP group that forces PKP group companies to procure goods and services from within PKP group. However, the problem caused by this practice not only affects PKP Regional; it affects the entire PKP group. Because of this practice, there are few opportunities for PKP group companies to choose other service providers outside of PKP group. Therefore, the practice might lessen the incentive to develop competitiveness of PKP group companies. Furthermore, PKP group companies cannot utilize those resources even if there are much more useful business resources outside of PKP group. Terminating internal trade practices such as this would help to build an overall stronger PKP group.

### **3.4.4 Compensation system for discounted tickets**

The discounted ticket system is regulated by the Railway Transportation Law. Losses caused by the discounted ticket system are compensated by the government. However, only a part of the loss can be compensated due to a shortage of governmental budgets at present. Therefore, PKP Regional and PKP Intercity bear a part of the losses from the discounted ticket system. The loss caused by the discounted ticket system in the fiscal year 2002 amounted to 109 million PLN. However, since the entitlements to the discounted tickets are not determined by PKP's management policy but rather by Polish governmental policy, the losses from the discounted ticket system should not be charged to the PKP group. In order to avoid this problem, the government of Poland should reduce the discounting rate to correspond with available governmental budgets.

### 3.5 PKP INTERCITY

#### 3.5.1 General outlook of financial status

Table 3.5.1 and 3.5.2 show the simplified financial statements of PKP Intercity in the fiscal year 2002. The fiscal year 2001 was from September to December. Therefore, the figure of the incomes statement in FY 2001 have been calculated by tripling the actual figures.

**Table 3.5.1 Incomes Statements of PKP Intercity in FY 2002**

(Unit: Thousand PLN)

Items	FY 2001	%	FY 2002	%
<b>Operational Revenue (1)</b>	<b>544,236</b>	<b>100.0</b>	<b>693,931</b>	<b>100.0</b>
<b>Operational Costs (2)</b>	<b>650,840</b>	<b>119.6</b>	<b>718,120</b>	<b>103.5</b>
(3) = (1) – (2)	-106,604	-19.6	-24,189	-3.5
Other Operational Revenue (4)	408	0.1	1,854	0.3
Other Operational Costs (5)	35	0.0	10,772	1.6
(6) = (3) + (4) – (5)	-106,231	-19.5	-33,107	-4.8
Financial Revenue (7)	1,772	0.3	2,186	0.3
Financial Costs (8)	17	0.0	1,478	0.2
(9) = (6) + (7) – (8)	-104,477	-19.2	-32,298	-4.7
Other Losses (10)	0	0.0	577	0.1
<b>Net Profits (11) = (9) – (10)</b>	<b>-104,477</b>	<b>-19.2</b>	<b>-32,982</b>	<b>-4.8</b>

**Table 3.5.2 Breakdown of Operational Costs**

(Unit: Million PLN)

Items	FY 2001	%	FY 2002	%
<b>Outsourcing Costs</b>	<b>480</b>	<b>73.7</b>	<b>400</b>	<b>55.6</b>
Energy & Material Costs	85	13.0	86	11.9
Wages & Allowances	40	6.2	50	7.0
Depreciation	44	6.7	59	8.2
Tax	1	0.1	1	0.2
Others	1	0.2	123	17.1
Total	651	100.0	718	100.0

Based on its income statements, the financial situation of PKP Intercity is being improved. This improvement was achieved by the reduction of outsourcing costs and an increase in sales. Most of the operational costs are due to the internal trade within the PKP group as well as trade with PKP Regional. However, the case of PKP Intercity is completely different from the case of PKP Regional because PKP Intercity does not have any obligation to be engaged in unprofitable train operations. Therefore, the most important matter for PKP Intercity is to reduce the internal trade costs for its profitable train operations, enhancing its international competitiveness.

#### 3.5.2 Sales collaboration system

In the fiscal year 2002, 48.6 % of PKP Intercity's tickets were sold at the ticket counters of PKP Regional. Therefore, the sales of PKP Intercity highly depend on the service level of PKP Regional's ticket counters, which cannot be easily controlled by PKP Intercity. In order to strengthen the marketing capability of PKP Intercity, consideration should be given to enlarging PKP Intercity's own sales network.

### **3.5.3 Internal trade prices**

#### **(1) TAC (PKP PLK)**

The percentage of TAC in the operational cost is 35 %. Therefore, the reduction of TAC has a huge influence on the financial situation of PKP Intercity. However, if there is business inefficiency in PKP PLK, the inefficiency influences the financial status of PKP Intercity through TAC and cannot be avoided by PKP Intercity's efforts. This matter shall be discussed in Chapter 11.

#### **(2) Rental fee (PKP Cargo)**

PKP Intercity rents locomotives and drivers from PKP Cargo. However, since PKP Intercity does not have enough information about the appropriateness of the rental prices, the business inefficiency of PKP Cargo might influence PKP Intercity through the rental fees and cannot be avoided by PKP Intercity's efforts.

Article 9 of the Corporate Tax Law of Poland regulates transactions among group companies. According to this article, companies in Poland have to prepare documents showing cost components of trade procured from group companies. These documents are expected to be used for tax inspections to investigate the appropriateness of internal trade prices among group companies. However, this article gives buyers the chance to know the cost components of the internal trades among group companies. Utilizing this data, PKP Intercity can negotiate with PKP Cargo to optimize the trade prices.

#### **(3) Energy cost (PKP Energetyka)**

PKP Intercity procures electricity from PKP Energetyka. At present, electricity charges from PKP Energetyka are based on the estimated electricity consumption. Therefore, actual electricity consumption is unknown. Under this circumstance, it is difficult for PKP Intercity to make efforts to reduce electricity charges. In order to avoid this problem, PKP Intercity should adopt a charge system based on the actual consumption as recorded by electricity meters.

However, note that the electricity charges based on the actual consumption might increase the expenditures for electricity. It would also serve as evidence for the inefficient operation of the train. If the new charge system is introduced, PKP Intercity needs to calculate standard electricity consumption for train operations and they develop criteria locomotive drivers to maintain for efficient operation.

### **3.5.4 Cash flow of PKP Intercity**

The largest debtor of PKP Intercity is PKP Regional, to which accounts receivable amounted to 89 million PLN at the end of the fiscal year 2002. PKP Regional and PKP Intercity collaborate with each other to sell tickets. PKP Regional sells tickets of PKP Intercity and pays the sales proceeds to PKP Intercity. However, some of the proceeds have not been paid to PKP Intercity because of cash shortages of PKP Regional.

PKP Intercity counts on this credit as resources of TAC payment to PKP PLK. However, if PKP Regional were to fall into insolvency, PKP Intercity cannot repay the debts to PKP PLK and will receive serious financial damage. In order to avoid this

situation, it is necessary to improve the Regional Transportation System.

### 3.5.5 Compensation system for discounted rickets

The discounted ticket system also has an influence on PKP Intercity. The loss caused by the discounted ticket system in the fiscal year 2002 amounted to 12 million PLN. The same issue and recommendation as described in 3.4.4 can be applied to PKP Intercity.

## 3.6 PKP CARGO

### 3.6.1 General outlook of financial status

Table 3.6.1 and 3.6.2 show the simplified financial statements of PKP Cargo in the fiscal year 2002. The fiscal year 2001 was from October to December. Therefore, the figure of the income statement in FY 2001 has been calculated by quadrupling the actual figures.

**Table 3.6.1 Incomes Statements of PKP Cargo in FY 2002**

(Unit: Thousand PLN)

Items	FY 2001	%	FY 2002	%
Operational Revenue (1)	6,017,189	100.0	5,923,246	100.0
Operational Costs (2)	5,886,961	97.8	5,548,683	93.7
(3) = (1) – (2)	130,227	2.2	374,563	6.3
Other Operational Revenue (4)	2,173	0.0	58,140	1.0
Other Operational Costs (5)	* 476,367	7.9	112,972	1.9
(6) = (3) + (4) – (5)	-343,967	-5.7	319,731	5.4
Financial Revenue (7)	15,072	0.3	29,309	0.5
Financial Costs (8)	18,625	0.3	106,230	1.8
(9) = (6) + (7) – (8)	-347,520	-5.8	242,810	4.1
<b>Other Losses (10)</b>	<b>* -81,264</b>	<b>-1.4</b>	<b>90,059</b>	<b>1.5</b>
Net Profits (11) = (9) – (10)	-266,256	-4.4	152,751	2.6

\* Some items in FY 2001 are not adequate to be quadrupled for the comparison between 2001 and 2002 and remain at actual figures.

**Table 3.6.2 Breakdown of Operational Costs**

(Unit: Million PLN)

Items	FY 2001	%	FY 2002	%
<b>Outsourcing Costs</b>	<b>2,825</b>	<b>48.0</b>	<b>2,539</b>	<b>45.8</b>
Energy & Material Costs	956	16.2	835	15.0
<b>Wages &amp; Allowances</b>	<b>1,647</b>	<b>28.0</b>	<b>1,630</b>	<b>29.4</b>
Depreciation	217	3.7	345	6.2
Tax	35	0.6	36	0.6
Others	207	3.5	163	2.9
Total	5,887	100.0	5,549	100.0

The amount of sales in the fiscal year 2002 was 5,923 million PLN, which were the largest sales among PKP group companies. On the other hand, the operational costs, which amounted to 5,549 million PLN in the fiscal year 2002, were also the largest amongst the PKP group companies.

Based on the income statement in the fiscal year 2002, the main operational costs were

outsourcing costs and personnel costs, which were equivalent to 75 % of all the operational costs. Among the outsourcing costs, the biggest item is TAC payment, which has a huge influence on the financial status of PKP Cargo. Controlling these items is a crucial agenda for PKP Cargo.

### **3.6.2 Potential financial risks**

#### **(1) TAC**

PKP Cargo produced a profit amounting to 153 million PLN in the fiscal year 2002. However, this profit was achieved by discounting TAC. The amount of TAC in the fiscal year 2002 was 1,645 million PLN. The average monthly payments of TAC in the fiscal year 2003 are to be 160 million PLN and the amounts of the annual payment can be estimated at 1,920 million PLN, if the TAC discount is not provided again. If there are no changes in the level of the revenues and the other costs, PKP Cargo may show a loss for the fiscal year 2003.

#### **(2) Trade with PKP Regional**

Some locomotives and drivers of PKP Cargo are used for the Regional Transportation System. This trade amounted to nearly 500 million PLN in the fiscal year 2002. However, a major part of the accounts receivable, which amounted to 320 million PLN, could not be collected because of the aggravated financial situation of PKP Regional. If trade between PKP Regional and PKP Cargo continues, the accounts receivable to PKP Regional will increase. In the case that PKP Regional falls into insolvency and PKP S.A. cannot afford to financially support PKP Regional, the cash flows of PKP Cargo will also deteriorate.

Furthermore, it is inevitable that the Regional Transportation System will be downsized in the future. At that time, a part of the locomotives and drivers will become redundant. Accordingly, PKP Cargo has to consider its own downsizing in order to prepare for the change in the Regional Transportation System.

#### **(3) Personnel costs**

The number of the employees of PKP Cargo was approximately 49 thousand at the end of the fiscal year 2002, which was the largest in numbers of employees among PKP group companies. Therefore, how to control the number of employees is a crucial item of the agenda in the management strategy of PKP Cargo.

However, Poland has an influential labour union that does not allow PKP group companies to conduct labour restructuring. Under this circumstance, the flexibility of controlling human resources is lost and increases in productivity cannot be easily achieved. Because this issue cannot be resolved by PKP Cargo alone, the government has to show a clear policy about how to treat the labour unions, taking in the financial situations of each organization into consideration.

### **3.6.3 Privatization process**

The basic idea behind the privatization strategy of PKP Cargo is that the privatization of PKP Cargo is the most important component in the implementation of the



restructuring of PKP S.A. because it will provide the largest source of funds for repaying the liabilities of PKP S.A. However, even if the privatization process proceeds, the problems in relation to the trade with PKP Regional and the difficulty in the rationalization cannot be easily resolved. The price of the stock for a company with those problems might be assessed at low prices by investors. As a result, the amount obtained from stocks for PKP Regional will decrease and make it difficult to repay its debts to PKP S.A. which in turn will make it more difficult for PKP S.A. to pay its own debts.

Therefore, in order to avoid problems such as these, privatization should not take place until the problems mentioned above are resolved. After resolving these problems, the improvements will be reflected on the stock prices, which will in turn contribute to an increase in the funds for the repayment of the debts. It should be noted that this change in the privatization schedule has to be reflected on the cash flow plan of PKP S.A.

### 3.6.4 Redevelopment of yard complexes (including freight stations)

Yard complexes are currently controlled by PKP Cargo. However, these represent significant land areas that are not necessary for the essential operations of PKP Cargo. This is due to the yards having been developed for historically much larger traffic and the range and type of installations. While the current volumes of traffic could be dealt with using a smaller land area, this cannot be done without a complete re-organization of the facilities to fit within a smaller area.

The essential land area required for cargo operations should be established and the required investments to allow these smaller portions of yard complexes to be effectively utilized should be quantified. The non-essential land areas could be commercially developed as real estate by PKP S.A., who would be required to raise funds. However, this development cannot be completed by PKP Cargo or PKP S.A. operating independently. These organizations will have to collaborate with each other in order to redevelop the lands more efficiently.

## 3.7 SUMMARY OF FINANCIAL ISSUES

Summary of the financial issues and the related parties is described in Table 3.7.1.

**Table 3.7.1 Summary of Financial Issues**

Recommendations	PKP S.A.	PKP PLK	PKP Regional	PKP Intercity	PKP Cargo	Government
Change in Privatization Schedules and Cash Flow Plans	M					
Budgetary Inspections by Independent Organization		M				
Governmental Support for Infrastructures						M
Setting Target Cost Lines with the Ability of Cost Estimation			M			
Change in Voivodship Funding System						M
Change in Discount Ticket System						M
Strengthening Market Capability			M	M		
Redevelopment of Marshalling Yard	M				M	
Labor Restructuring		M	M		M	

The highlighted parts indicate concerned parties. "M" means the Main responsible organization of the issues.

According to Table 3.7.1, most of the issues are related to each other and cannot be

resolved by any one individual organisation. Comprehensive business planning and governmental policies are necessary for resolving these issues.

### 3.8 FINANCIAL BACKING UP FOR THE RAILWAY REFORM

#### 3.8.1 Investments

##### 3.8.1.1 Railway infrastructures

Table 3.8.1 shows the necessary amounts for improvements of the railway infrastructure based on the recommendations of JICA Study Team. Some EU funds are available for these improvements. By utilizing those funds, the Polish government can improve the railway infrastructure with approximately 20 % of amount actually necessary for the improvement of the infrastructure.

**Table 3.8.1 Necessary Amounts based on Recommendations**

(Unit: million PLN)

Year	Backlog	Introduction of CTC	Total	Fund Resources	
				Poland	EU Funds
2004 - 2006	2,836	0	2,836	2,836	0
2007 - 2010	2,127	11,592	13,719	4,445	9,274
Total	4,963	11,592	16,555	7,281	9,274

Conversely, the necessary amounts of investments to meet the requirements of EU accession are described in Table 3.8.2.

**Table 3.8.2 Necessary Amounts for EU Accession**

(Unit: million PLN)

Year	Obligation of EU Accession	Poland	EU Funds
2004 - 2006	5,053	1,011	4,043
2007 - 2010	9,777	1,955	7,822
After 2010	40,638	8,128	32,510
Total	55,468	11,094	44,375

The necessary amounts for years 2004 - 2006 have been calculated based on the investment plans of PKP PLK. In practice, the available amounts of EU funds in the year 2004 – 2006 have been calculated at approximately 5,460 million PLN. This means that Polish government will fail to utilise a part of the EU funds that amounts to 1,417 million PLN. This is mainly caused by the fact that Polish side cannot provide enough funds on hand that are necessary to utilise EU Funds. In order to make use of the available EU funds, the Polish government is expected to prepare additional funds and direct PKP PLK to revise its investment plans.

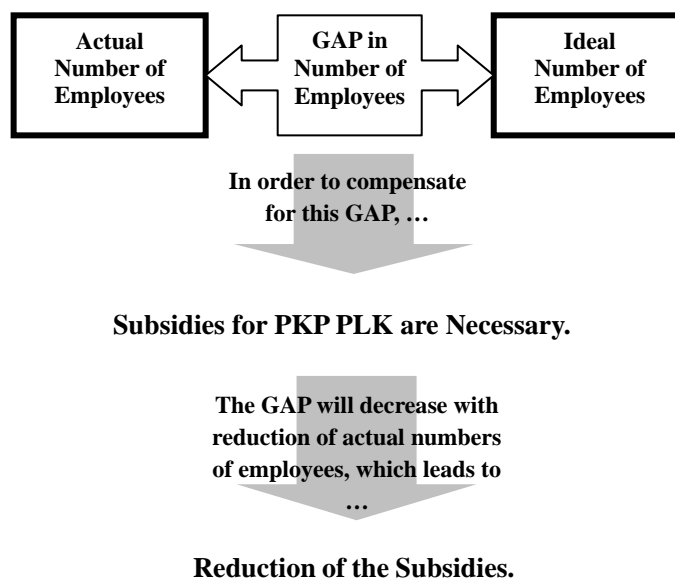
The amounts of available EU funds after the year 2007 have not been decided and will be negotiated with EU from now. **The Polish government should strive to prepare the required funds on hand in order to make full utilisation of the EU funds available.**

**It should also be noted that the Polish government should not make PKP PLK bear the financial burdens of the new investments because such financial burdens**

**will inevitably be passed on in the TAC to the train operating companies that are expected to privatise.**

### 3.8.1.2 Governmental subsidies for reduction of TAC

Since it is difficult to drastically reduce the operational costs of PKP PLK in the short-term, the governmental subsidies are necessary to reduce TAC. However, in the long-term, modernising the train operation control system can contribute to a dramatic reduction of personnel costs. Therefore, it is recommended that until the completion of the modernisation, the Polish government should subsidise PKP PLK to compensate for the gaps between ideal personnel costs and actual personnel costs in order to reduce TAC. Figure 3.8.1 shows this concept.



**Figure 3.8.1 Concepts of Labor Restructuring**

In fiscal year 2002, the average personnel costs per employee of PKP PLK can be calculated at approximately 30,000 PLN. Based on the recommended labour restructuring schedule for PKP PLK, the amounts of necessary subsidies can be calculated as shown in Table 3.8.3.

**Table 3.8.3 Necessary Amounts of Subsidies for PKP PLK**

(Unit: million PLN)

Year	Necessary Amounts	Total
2004	625	1,444
2005	481	
2006	338	
2007	259	557
2008	179	
2009	99	
2010	20	
2011	16	
2012	12	40
2013	8	
2014	4	
2015	0	
Total	-	2,041

The governmental policy and the management policy of PKP PLK largely influence the actual number of employees. Therefore, Polish government and the management of PKP PLK can decrease the amounts of the subsidies by accelerating labour restructuring. **In another word, the faster labour restructuring advances, the sooner the money required for subsidies will be reduced.**

#### 3.8.1.3 New rolling stock with governmental leasing organization

Though in the short and medium terms, the financial situations of the operating companies will be improved, but those operating companies may not obtain enough funds to obtain new cars. If Polish government provides the money for the new cars to resolve this problem, the financial burden of Polish government will drastically increase. In order to resolve this problem, it is recommended that leasing companies guaranteed by Polish government be established.

There are several existing European leasing companies. Generally speaking, leasing companies decide leasing fees by taking into consideration country risks, industry risk and company risks. However, the company risks of PKP group companies may increase the leasing fees, which would in turn, become the financial burdens of the train operating companies. Therefore, it is recommended that car leasing companies guaranteed by Polish government be established in order to eliminate the financial burdens caused by the higher lease rates associated with company risks.

It should be noted that the newly established leasing companies have to have enough ability to appraise investment plans made by the operating companies. In addition, the operating companies also have to have enough ability to make sound investment plans. Otherwise, The leasing companies will immediately go bankrupt and the governmental guarantees will be implemented, which will lead to the increase in the governmental disbursement. **Therefore, the new leasing companies have to be established based on a thorough study of the management methods used in various foreign countries.**

One of the candidates to study the management methods is EUROFIMA. EUROFIMA

is a supranational organisation. Its members, which are also its customers, are European railways. EUROFIMA fulfils a task of public interest. It is located in Basle. Its constitution, purposes and activities are as follows.

**(Constitution)**

EUROFIMA was founded on November 20, 1956 for a period of 50 years as a joint-stock company. It is governed by an international convention signed by its member governments on October 20, 1955 and by the law of the country in which it is located. The decision of the extraordinary General Assembly of February 1, 1984 to extend this period for an additional 50 years, until 2056, was approved by all the member governments.

**(Purpose)**

EUROFIMA's shareholders are the railways of the European countries and the governments of which are parties to the Convention. EUROFIMA's purpose is to support the railways, some of which are its shareholders, as well as other railway bodies in renewing and modernising their equipment.

**(Activity)**

EUROFIMA finances railway equipment through borrowings, equity capital and so on. The general principles of the company's activity are defined in an agreement between the railways and EUROFIMA. That agreement remains valid for the entire duration of EUROFIMA's existence and can be altered with the agreement of all the railways and the company. EUROFIMA's equity capital is utilised principally for investments in money market paper or bonds and financing railway equipment.

### **3.8.2 Labor restructuring**

#### **3.8.2.1 Necessary amounts for labour restructuring**

When conducting the labour restructuring, it is necessary to have in place an early retirement system and job transfers to railway-related undertakings or government-related organizations. It is desirable to have a program that lists the conditions of early retirement by phase.

According to the results of labour restructuring conducted by PKP group from 2001 December to first quarter in the fiscal year 2003, the amount of average restructuring costs per employee was approximately 14,000 PLN.

Based on the analysis so far, PKP Regional, PKP Cargo and PKP PLK have the problem of excess personnel. Necessary costs for restructuring are described in Table 3.8.4.

**Table 3.8.4 Numbers of Employees to be Restructured**

(Unit: million PLN)

Items	PKP Regional	PKP Cargo	PKP PLK	Total
Number of Employees to be Restructured (thousands)	11	22	30	63
Necessary funds total (millions PLN)	154	308	420	882
Including:				
Year 2004 –2006	140	252	252	644
Year 2007- 2010	14	56	154	224
Year 2010- 2015	-	-	14	14

One of the most uncertain factors in calculating the necessary funds for labour restructuring is the policy of voivodships toward the unprofitable train operations. Figures in Table 11.5.4 are based on the assumption that no voivodship accepts the transfers of unprofitable train operations. **Therefore, necessary funds for labour restructuring can be reduced by a corresponding increase in the number of voivodships that accept the transition of unprofitable train operations.**

### 3.8.2.2 Funding responsibility

The average personnel costs per employee are calculated at approximately 30,000 PLN. Therefore, personnel costs of each company will drastically decrease as a result of labour restructuring. Accordingly, each of the companies that are the direct beneficiaries of the labour restructuring is expected to pay for the respective expenditures.

However, considering the current situation that each company suffers from a cash shortage, PKP S.A. and the government are expected to bear those financial tentatively. PKP S.A. is expected to pay the labour restructuring costs of PKP Regional and PKP Cargo because those costs will be reimbursed by privatisation revenues. However, labour restructuring costs of PKP PLK are expected to be paid by Polish government, because the government is responsible for maintaining the good condition of the railway infrastructures through such labour restructuring. The costs for labour restructuring of PKP PLK can be reimbursed through saving the personnel costs.

### 3.8.2.3 Consideration of another option

Another option that can be considered is that the labour restructuring of PKP Cargo and PKP Regional be conducted after their privatisation. This option should be considered if PKP S.A. cannot prepare enough funds for the labour restructuring. In this option, investors in each company are expected to prepare funds for labour restructuring.

**It should be noted that, with this scenario, the value of the companies will decrease by more than the amounts of necessary funds for labour restructuring. This is because it is difficult to evaluate influences of the labour unions of Poland and such potential problems with the labour unions may discourage the willingness of investments.**

### 3.8.3 Repayment of debts

The external debts of PKP S.A. and the internal debts of PKP Regional have to be settled.

#### 3.8.3.1 PKP S.A.

Some of the debts of PKP S.A. cannot be repaid using only the revenue from the privatization of the subsidiaries. Repayment of the bonds and other long-term debt will cause a serious financial problem after the fiscal year 2009.

The following should be considered as methods for resolving this financial problem.

(1) PKP S.A. obtains additional funds by rationalizing the yard complexes and selling the rest of the land by the year 2009.

(2) Polish government repays the remaining debts instead of PKP S.A.

In order to complete the measure of (1), settlement of property right problems is mandatory. **Therefore, in settling the problems, it is necessary to give priority to assets with comparatively higher market value and concentrate on them.**

If those yard complexes can be rationalized and redeveloped, additional funds can be achieved by selling the rest of the land. Other financial resources are necessary in order to rationalise those yard complexes. These resources can be obtained by mortgaging the assets to banks and investors, but it can be difficult for the banks or the investors to provide enough funds without persuasive development plans. Therefore, sound development plans are necessary to attract the banks or the investors.

If the redevelopment does not complete until the fiscal year 2009, Option (2) mentioned above, has to be taken. It should be noted that, in this case, the losses caused by taking over PKP S.A.'s debts by Polish government could be compensated by the redevelopment of the yard complexes after the fiscal year 2009.

#### 3.8.3.2 PKP Regional

At the end of the fiscal year 2002, the debts of PKP Regional amounted to approximately 1.5 billion PLN. Assuming that annual net losses of PKP Regional are 1 billion, the debt is projected to be at approximately 3.5 billion PLN by the end of the fiscal year 2006. Note that labour and organisational restructuring could reduce this debt. Most of the debts are to PKP group companies, which are suffering from cash shortage due to the uncollectible accounts receivable from PKP Regional.

The present negative cash flow caused by the trade with PKP Regional will erode the infrastructures of PKP PLK and lower the values of PKP Cargo, PKP Intercity and PKP Energetyka. Accordingly, it would be prudent if PKP S.A. and the government assume a part or all of those debts.

Basically, the most desirable solution for this problem is that PKP S.A. and the government assume all of those debts because the government and the management of PKP S.A. are responsible for the current situations in which PKP Regional continues to

make structural losses. However, on the practical side, given the current financial situations of PKP S.A. and the government, they are only capable of assuming part of the debt. In this case, the amounts of the debts to be assumed should be carefully calculated in order to avoid the sudden bankruptcy of the operating companies. In particular, PKP Intercity, which is now making marginal profits, could be financially damaged by such a write-off. **Therefore, if PKP S.A. and the government are going to assume a portion of the debts, they should do so only after precisely analysing the future cash flows of the operating companies that are expected to privatise and make sure that enough funds are available to ensure the success of the undertaking.**

### 3.8.4 Summary of necessary funds

Table 3.8.5 shows a summary of the funds needed for improvements of the railway business in Poland.

**Table 3.8.5 Summary of Necessary Funds for Recommendations**

(Unit: Million PLN)

Items	2004 - 2006	2007- 2010	After 2010	Total	Source of Fund	NOTE
<b>(Funds for Infrastructure)</b>						
Eliminating Backlog and Introduction of CTC	2,836	4,445	-	7,281	Polish Government	Utilization of EU funds
Subsidies for PKP PLK	1,444	557	40	2,041	Polish Government	Possible to reduce the subsidies by promoting labour restructuring of PKP PLK
Total	4,280	5,002	40	9,322		
<b>(Funds for Labor Restructuring)</b>						
Labor Restructuring Costs of Operating Companies	392	70	-	462	PKP S.A.	Reimbursable through Privatization
Labor Restructuring Costs of PKP PLK	252	154	14	420	Polish Government	Reimbursable through Saving Personnel Costs
Total	644	224	14	882		
<b>(Funds for Undertaking Debts)</b>						
Remaining Debts of PKP S.A.	-	2,000	-	2,000	Polish Government	Reimbursable by Development of Real Estates

### 3.8.5 Fund availability

#### 3.8.5.1 Expansion of National Budget

Table 3.8.6 shows the comparison between Poland and Germany with regard to the proportions of expenditures for railway business out of the total state budgetary expenditures.

**Table 3.8.6 Comparison between Poland and German**

Items	Poland	Germany
Years	2002	2001
Unit	Million PLN	Million EURO
Expenditures for Infrastructure	163	5,177



Expenditures for Train Operations	496	772
Total (A)	659	5,949
State Budgetary Expenditures (B)	182,922	243,886
(A)/(B)	0.36 %	2.44 %

Based on Table 3.8.6, the level of financial contribution of Polish government for railway business is approximately one-sixth of that in the neighbouring country of Germany. It can be regarded that the financial supports of Polish government for the railway sector are comparatively lower. Therefore, Polish government should consider increasing the financial support for the development of the railway business of Poland.

### (1) Treasury Bonds

In order to meet this financial necessity, it should be considered that Polish government should raise funds by loans and additional treasury bonds. Table 3.8.7 shows liability/GDP ratios of various EU countries.

**Table 3.8.7 Liability/GDP Ratios**

Years	1990	2000	2001	2002
Germany	43.5 %	60.2 %	59.5 %	60.8 %
France	35.1 %	57.2 %	56.8 %	59.1 %
Italy	97.2 %	110.6 %	109.5 %	106.7 %

Data source: European Commission (2003), Spring Economic Forecasts

Based on Table 3.8.7, major EU countries heavily rely on liabilities as financial resources. By comparison, the liability/GDP ratio of Poland in the year 2002 was approximately 42.5 %. In addition, the growth rate of GDP on Poland from the year 1995 to 2001 was 29.7 %. Accordingly, it appears that Poland has more opportunities to raise additional funds than the other EU countries. The Polish government could meet the financial demands for the future of the railway business by realizing and utilizing these additional opportunities for raising funds.

**It should be noted that the problems with regards to fund shortage for railway business is NOT caused by the real shortage of funds. The problem is caused by the fact that participants of the railway business cannot show the ideal business model to investors or MOF. In order to raise funds from investors or MOF, the participants in the railway business have to attract them by showing persuasive policies and business strategies.**

### (2) Taxation measures

As a means to resolve the environmental and safety problems arising from motor transport, a fuel tax should be levied to promote a modal shift in transportation and provide funds to the railways.

#### 1) Fuel Tax

At present, a portion of the fuel tax is specified as road funds. The railways are also paying fuel tax because of the use of diesel fuel. In other words, the current tax system runs counter to the idea of modal shift towards mass transit, which is a basic EU

principle. To resolve this problem, the portion of fuel tax levied against the railways that is specified as road funds should be eliminated. Furthermore, transferring the currently specified road funds to the general account can help secure part of the funds for making railway investment.

## 2) Introduction of Environmental Taxes

**Road Tax:** It was introduced by Switzerland in 1998 to levy tax against long-distance motor trucks; half of the amount is used for investment in railways. Austria and other European countries are reviewing the adoption of road tax from the viewpoint of environmental protection. This tax can also be applicable to Poland.

**Eco Tax:** It was a tax system introduced by Sweden in 1991 to levy tax according to the amount of CO<sub>2</sub> emissions. It is believed to be an effective measure for environmental conservation, which is a basic EU stance.

## 3) Traffic Demand Management

From the viewpoint of traffic demand management, some countries levy a congestion charge in areas in big cities that suffer from severe congestion. Singapore first introduced this. The recent enforcement of this tax in the central part of London attracted attention. Introduction of this tax will be effective in areas, such as Warszawa, where traffic congestion is likely to worsen rapidly.

### 3.8.5.2 EU Funds

The Structure Fund and Cohesion Fund are EU funds that will be available for use in the future. These funds can be used for infrastructure investment and the procurement of some rolling stock. With the Polish Government contributing a portion of the necessary amounts, various investments can be made. The following are EU funds that can be employed.

**Table 3.8.8 Available EU Funds**

Name of Fund	Description
Structure Fund	The Fund was founded with the objective to correct regional disparities and structural barriers in Member States in order to build an integrated economic society in the EU. This Fund includes the European Regional Development Fund (ERDF), which is used for the development of social infrastructure to promote regional policies. Railways are also part of the infrastructure development. To use the Fund, Poland must prepare its own funds to pay for 25% of the project cost.
Cohesion Fund	The Fund was founded pursuant to the Maastricht Treaty. It aims at getting rid of economic disparities in the EU and providing stability in the transition to a single currency. It is available to economically adverse countries with GDP less than 90% of the average EU Member States. TEN (Trans-European Network) projects and environment-related projects are eligible for the Fund. Railways are included in the projects. To use the Fund, Poland must prepare its own funds to pay for 15% of the project cost.

In reality, however, because the Polish Government is facing a financial crisis and it takes time to prepare and issue work orders and to obtain EU approval, only 19% (2002 figure) of the available EU funds were used. In order to make the most of the EU funds, the government needs to procure its own funds and expedite the procedures for various projects.

### **3.8.5.3 Utilizing PPP (Public-Private Partnership)**

The PKP companies are expected to modernize various facilities from now on. However, as there are limits to the ability of PKP PLK to contract and supervise engineering works as well as limits to the financial strength of the various transport companies, it is necessary to consider utilizing the capabilities of the private sector.

Under such circumstances, it is recommended to use the PPP (Public-Private Partnership) approach for various kinds of modernization. PPP enables proper risk sharing with the private sector, stable and long-term investment using private funds, and utilization of the private sector's project management technology, etc. PPP is a generic term to describe the practice in which the operations of a public service area are open to the private sector while the expertise and funds of the private sector are utilized through cooperation of the government and the private sector. This practice takes many forms, including outsourcing to private contractors, PFI (Private Finance Initiative), independent administrative entities, and privatization, etc. In applying PPP to railway modernization projects, it is necessary to review the characteristics of PPP thoroughly, draw up the most appropriate scheme for each individual project, estimate the cost effectiveness by comparing with the scenario in which the project is implemented as a public work project, and make the final decision.

In relation to this, the Polish Government is working on the enactment of a PPP law with a view towards promoting PPP. Even within the current legal framework in Poland, it is possible to undertake a project using the PPP method. However, the PPP practice has not taken root in Poland and the procedures are complicated, creating a barrier to the use of PPP. In view of this, the Polish Government plans to establish legal backing for the PPP method by way of a PPP law and simplify the various procedures that accompany execution of the PPP method.

Based on this new law, the Polish Government could utilize the PPP method to improve regional passenger transport and develop logistics centers for the time being, and modernize tracks and promote the new Warszawa–Berlin high-speed train project in the future.

## **3.9 FINANCIAL OUTLOOK**

### **3.9.1 Assumed worst case**

Table 3.9.1 shows projected income statements of PKP group companies at the fiscal year 2010 with basic assumptions as follows.

- Revenue calculations are based on the demand forecast made by JICA Study Team.
- The productivity of each company will not be improved until 2010.

- PKP Regional does not terminate any train operations until 2010.
- PKP Regional obtains subsidies from voivodships at 2002 levels.
- PKP PLK does not terminate any railway lines until 2010.
- New investments, which are mandatory for EU accession, increase the interest payments and depreciation costs, which then lead to increase in TAC. (The amounts of the investments are based on the plans that PKP PLK is now planning.)

**Table 3.9.1 Projected Incomes Statements of the Worst Case (2010)**

(Unit: Millions PLN)

Income Statements	PKP Regional	PKP Intercity	PKP Cargo	PKP PLK
(Operational Revenue)				
Passengers & Freights	1,153	601	5,095	3,606
Government	460	25	-	-
Others	91	2	49	27
Operational Revenue Total	1,704	628	5,143	3,633
(Operational Costs)				
Personnel Costs	653	55	1,630	1,380
TAC to PKP PLK	1,123	329	1,965	-
Rental Costs to PKP Cargo	475	53	-	-
Other Outsourcing Costs	361	153	754	714
Energy & Material Costs	548	94	704	290
Depreciation Costs	61	59	345	894
Other Operational Costs	195	16	263	172
Operational Costs Total	3,416	759	5,661	3,449
(Operational Income)	-1,712	-131	-517	184
Interest Payments	7	0	34	184
Net Income	-1,719	-131	-551	0

As described in Table 3.9.1, the financial situations of each group companies will become worse. In this case, even though PKP PLK does not appropriate losses, collecting account receivables from three train-operating companies becomes difficult and PKP PLK cannot obtain funds for the maintenance costs by TAC. This situation is mainly caused by decrease in demand and new investment funded by PKP PLK. Figure 3.9.1 shows a relationship of the problems and the expected results.

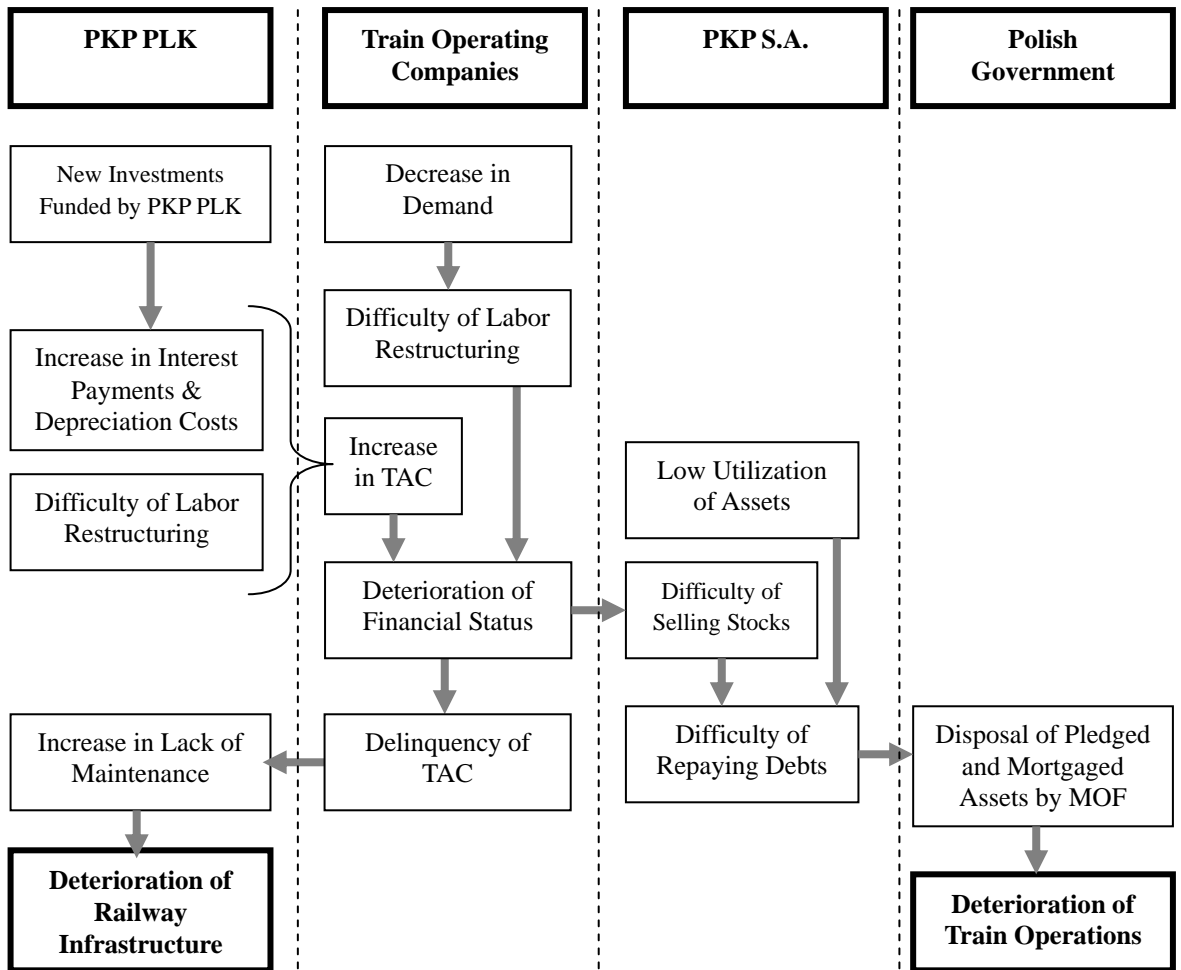


Figure 3.9.1 Relationship of Problems and Results

The problems described in Figure 3.9.1 will be intensified if;

- (1) train operating companies fail to restructure their organisations, corresponding with the shrinking demands, and
- (2) PKP PLK raises TAC in order to cover the increasing interest payments and depreciation costs caused by the new investments through the lack of governmental subsidies.

In order to resolve the problems mentioned above, it is expected that Polish government financially support PKP group companies and each company complete downsizing with increase in productivity.

### 3.9.2 Analysis of influence by recommendations

#### 3.9.2.1 Relationship of recommendations

In order for PKP group companies to complete the downsizing with increase in productivity, several recommendations are made in this report. Figure 3.9.2 shows a relationship of the recommendations.

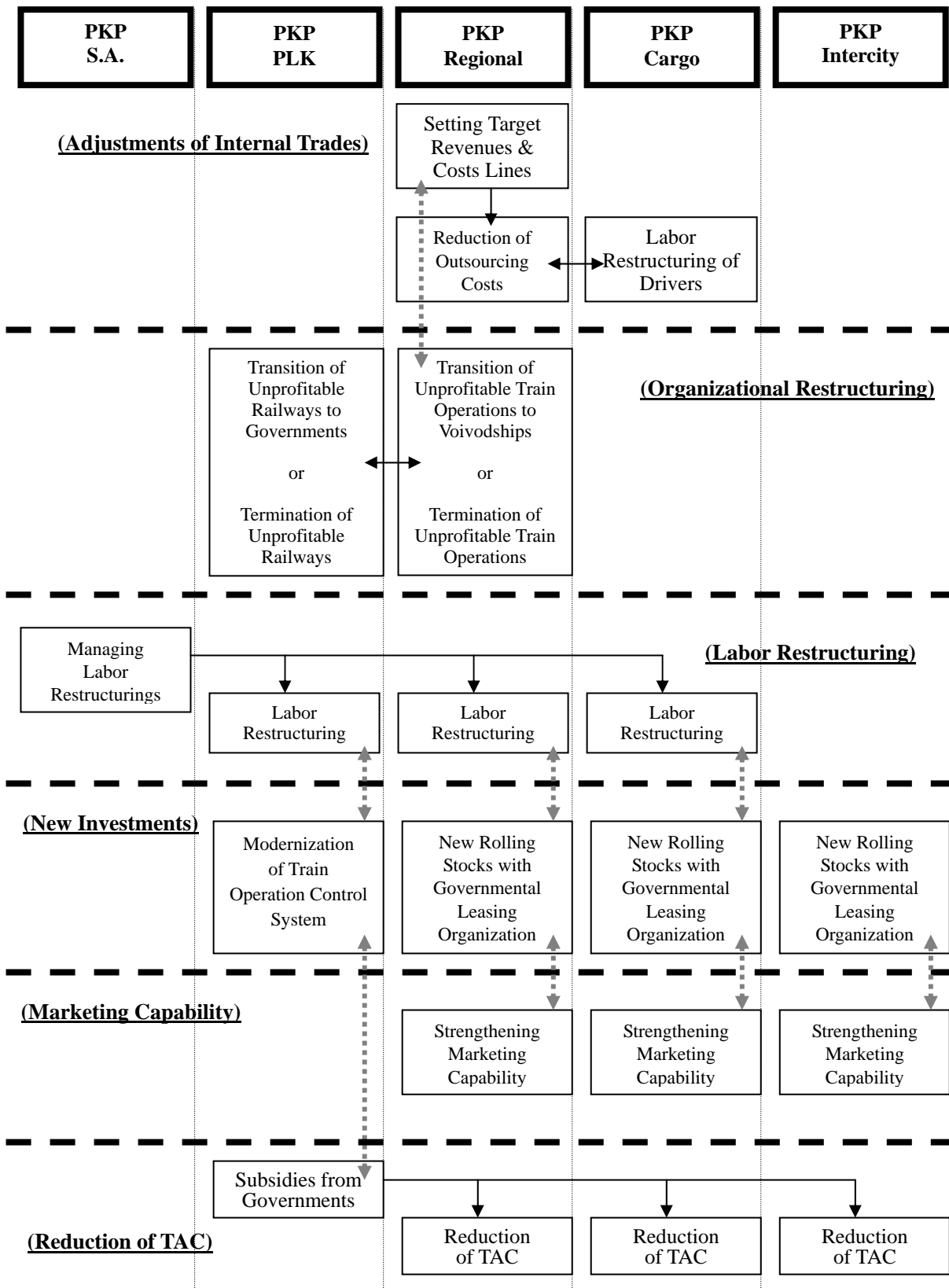


Figure 3.9.2 Flow Chart of Financial Analysis

### 3.9.2.2 Summary of financial analysis of recommendations

The projected income statements of PKP group companies at the fiscal year 2010 with

the recommendations of JICA Study Team are described in Table 3.9.2.

**Table 3.9.2 Projected Incomes Statements with Recommendations (2010)**

(Unit: Millions PLN)

Income Statements	PKP Regional	PKP Intercity	PKP Cargo	PKP PLK
(Operational Revenue)				
Passengers & Freights	850	661	3,923	1,520
Government	181	45	-	20
Others	67	2	38	8
Operational Revenue Total	1,098	708	3,961	1,548
(Operational Costs)				
Personnel Costs	369	69	887	526
TAC to PKP PLK	286	201	946	-
Leasing Costs of New Cars	185	99	-	-
Other Outsourcing Costs	72	116	186	431
Energy & Material Costs	142	64	472	174
Depreciation Costs	0	30	189	298
Other Operational Costs	39	12	850	104
Operational Costs Total	1,094	590	3,530	1,533
(Operational Income)	4	118	431	16

It should be noted that levels of TAC highly depend on the railway network size. The projected income statements in Table 3.9.2 are based on the assumption of Table 3.4.7 that voivodships assume operation of the train operations that are not commercially viable. In terms of train kilometres, these operations are equivalent to 37 % of the entire train kilometres.

If a number of the train operations undertaken by voivodship decreases, TAC may increase and financial burdens of the operating companies may increase. Therefore, it is imperative that the voivodships assume responsibility for as much of these non-viable train operations as possible in order to decrease the crucial TAC level.

## **CHAPTER 4 LEGAL/ORGANIZATIONAL ISSUES FOR PRIVATIZATION AND STRATEGIC MANAGEMENT**

In the first half of this chapter, the legal framework of EU and the adaptation of Poland as a member state shall be identified. New demands to Poland by the European Initiative for Growth, the so-called “Prodi’s Initiative,” will be analyzed. In the area of domestic legal affairs, the important clauses of the legal framework on the standpoint of the restructuring and privatization of PKP shall be identified.

In the second half of this chapter, the organizational system of the PKP group companies in order to carry out the restructuring and privatization shall be analyzed. The administrative organization of the Ministry of Infrastructure shall be also analyzed in order to establish the government leadership to the reform of PKP.

The study was done mostly through the interviews with the government officials and the management of PKP group companies.

At the conclusion of this chapter, government leadership and responsible management of the PKP group that might be the key factors to the success of the restructuring and privatization of PKP are summarized. Further amendments of the law of railway transportation and the law of commercialization, restructuring and privatization of PKP are also addressed.

### **4.1 ADAPTING TO THE LEGAL FRAMEWORK OF THE ENLARGED EU**

In May 2004, Poland is going to become a member state of the EU. What is the legal framework of the enlarged EU in regards to railway transportation? How has Poland adapted to the framework legally and organizationally? What problems remain in the Polish railway industry?

#### **4.1.1 Legal Framework of EU**

The legal source of the framework is clearly listed in the EU homepage (cited June 16, 2003). Refer to it at: [http://europa.eu.int/comm/transport/rail/legislation/legi\\_en.htm](http://europa.eu.int/comm/transport/rail/legislation/legi_en.htm)

The important principles of these treaties and directives are intended to open markets and keep competition in the EU community. The “open access rule” to the railway network by the member states is the basic railway policy of the EU. In other words, interoperability should be maintained throughout the operation of the railway network.

Adjustment to meet the framework of the EU is a prerequisite condition for Poland to become a member state. Application of Accession was submitted in April of 1994. Negotiation on transport started in December of 1999 and finished in June of 2002.

The negotiation in the area of railways was done on the basis of so-called “First Package” of the directives.

Major legislation included in the First Package are as follows.

- Directive 2001/12 amending Council Directive 91/440/EEC on the development of



the Community's railways.

- Directive 2001/13 amending Council Directive 95/18/EC on the licensing of railway undertakings.
- Directive 2001/14/EC replacing Council Directive 95/19/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure (TAC) and safety certification.

Major issues of the negotiation on railways are:

- (1) the reduction of liabilities of PKP S.A., and
- (2) the transition period that has been set for the end of 2006.

In other words, full competition in the railway industry will start from 2007. The time allowance to prepare for the EU standard is very limited for Poland.

The EU Commission announced "Second Package" amending "First Package" on January 2002.

Five new Proposals of the Second Package are as follows.

- Developing a common approach to rail safety to integrate the national safety systems.
- Bolstering the fundamental principles of interoperability in the entire open network.
- Setting up an effective steering body, The European Railway Agency, which will play a liaison role between the different competent national authorities.
- Extending and speeding up opening of the rail freight market.
- Joining the International Organization for International Carriage by Rail (OTIF).

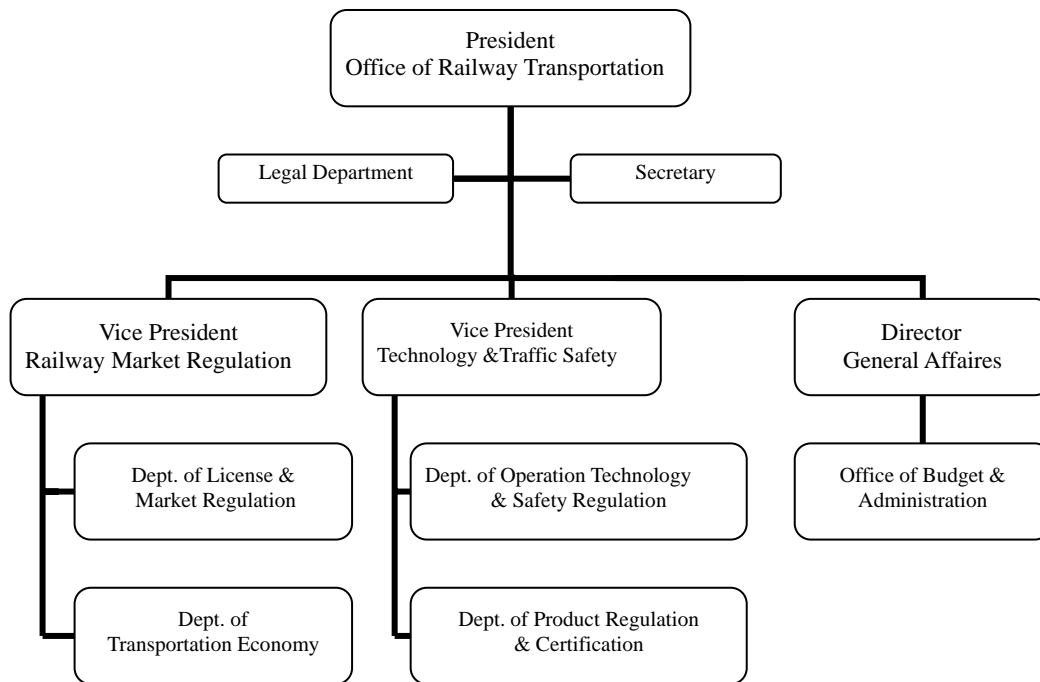
It is possible to say that the recent reform of PKP Group is aimed at harmonizing it with the EU framework. The legal harmonization of Poland was finished by the enactment of the Law on Railway Transportation (Official Journal of the Republic of Poland, 17 May 2003). This law is not an amendment of the old law. It is the new legal system for the Polish railway industry as a member state of the EU.

#### **4.1.2 Organization and Function of UTK**

The accession of the EU has brought about the new Law on Railway Transportation (March 28, 2003, hereinafter called the law), which replaced the old Law on Railway Transportation (June 27, 1997). More than half of the articles of the law are clauses relating to the newly established Railway Transport Office (UTK).

The Railway Transport Office (UTK) was established on June 1, 2003 and took over the role of General Inspector of Railways as an independent administrative agency of the government, serving as the counterpart of the European Railway Agency. The chairman of the UTK is appointed by the Prime Minister. Its organization and function

are governed by the Law on Railway Transportation..



**Figure 4.1.1 Organization of UTK as of November 2003(simplified)**

Its basic tasks (Article. 10, Paragraph 1) are:

- regulation of the railway transport market,
- licensing of railway undertakings
- technical supervision for the utilization and maintenance of railway lines and rail vehicles, and
- railway transport safety.

In short, UTK is the specialized body for regulating competitiveness and safety of the railway market.

The President's tasks of UTK in regard to railway transportation regulation shall include (Art. 13, Paragraph 1 of the law):

- (1) approval and coordination of fees for the use of railway infrastructure linked to allocated train itineraries, in compliance with the principles of establishing such fees;
- (2) supervision over the operators' equal access to railway infrastructure;
- (3) supervision over the equal treatment of all railway operators by the administrators, especially in examining the applications for the allocation of train itineraries and the calculation of the fees;

- (4) supervision over the appropriate setting by administrator of the basic fees for the use of railway infrastructure and of the extra fees for additional services;
- (5) examination of complaints lodged by railway operators, concerning:
  - 1) rules and regulations referred to Art.32,
  - 2) allocation of train itineraries and the fees for the use of railway infrastructure;
- (6) collection and analysis of information on the railway transportation market;
- (7) cooperation with competent authorities in the field of:
  - 1) combating monopolistic practices by railway administrators and operators,
  - 2) coordination of the functioning of railway transportation market;
- (8) imposition of financial penalties following the principles defined under the law.

The UTK is the organization regulating the railway market domestically and internationally. Each member state should have similar organization to maintain interoperability and competitiveness throughout the EU.

The UTK is attracting certain expectations.

#### **(1) The expectation of fairness**

Railway operators, for example PKP Regional and Intercity in particular are expecting fair regulation. The Polish operators are facing a gap in negotiation power to the PKP PLK S.A., monopolistic infrastructure administrator of Poland. Such kind of the expectation to the UTK is based on its power provided by above-mentioned Article 13, Paragraph 1. Legislation of special laws on Point (5), above, of the examination of complaints lodged by railway operators is now under way.

#### **(2) The expectation of its contribution to technical developments**

Another major expectation is its role in the technological development of the Polish railways. The UTK shall undertake all kinds of technical safety examinations on infrastructure, vehicles, traffic control, qualification of personnel and so on, before and after issuance of certificates following the standards set by MOI ordinances (Art.19 of the law). Interoperability throughout the EU countries is one of the most important standards to the examinations.

### **4.1.3 The New European Initiative for Growth (“PRODI’S INITIATIVE”)**

In October 1, 2003, the Commission released “An European Initiative for Growth”.

( Interim Report to the European Council, Brussels, 1.10.2003 COM(2003)579 final).

President of the Commission, Romano Prodi, announced that the Commission and the Member States’ governments must, in the current economic situation, give a strong signal of economic governance in order to boost confidence in the Union’s economic

potential and consolidate economic growth.

“ Prodi's Initiative ” targets public and private investment in networks and knowledge. It identifies the following priorities.

- Moving ahead with the priority Trans-European transport projects requiring EUR220 billion investment by 2020.
- Accelerating the roll out of high-speed broadband communications.
- Strengthening the Union’s capacity to generate and use knowledge.

It set out a roadmap for decisions and examined possible sources of financing for the European Initiative for Growth, focusing particularly on how public spending might provide a catalyst for private investment.

Of course, the Community budget can play a key role. The TEN-Transport budget contributes EUR700 million yearly to fund up to 10% of total project costs, and possible funding of up to 30% of the costs of the cross border sections of the priority projects. Over the current period from 2000 to 2006, the Structural Funds are foreseen to provide some EUR29.2 billion, aimed particularly at transport infrastructure. Furthermore, the Cohesion Fund resources can mobilize up to EUR1.5 billion yearly for infrastructure investment in the four Cohesion Countries including Poland.

The European Investment Bank (EIB) is also fully engaged in the Growth Initiative.

The EIB is prepared to commit EUR50 billion under a TENs Investment Facility (TIF) in support of TENs priority projects.

Mobilizing private investment will be a central factor in boosting the Union’s growth potential over the years ahead. The creation of fully integrated financial market by 2005 is crucial in this respect. It can be instrumental in helping to make the enormous pool of European savings available - some EUR10 trillion - for growth related projects across the Union.

The combination of an affluence of savings in financial markets and the leverage effects of EIB’s top-credit rating offers a unique opportunity to attract private investment. This opportunity is also a result of the progress made in consolidating public budgets within the framework of the Stability and Growth Pact that is freeing private resources which are now available and that can now be diverted to support the Initiative for Growth.

The Commission identified a number of Quick-start Transport Projects which involve investment of EUR38 billion between now and 2010. Using the Quick-start criteria, the projects selected are predominantly mature cross border rail connections, sea and inland waterways or road links.

Some projects related to Poland include the following.

- Railway line for Gdansk-Warszawa-Brno/Bratislava-Wien (EUR240 million signed for the whole priority project).

- Motorways for the Baltic Sea region (EUR 1.8 billion signed for EU port projects in the four regions).
- “Rail Baltica” line for Warszawa-Kaunas-Riga-Tallinn (No involvement yet).

The roadmap of both Commission and EIB/EIF actions side by side was concretely identified from now through by December of 2004.

This “Prodi’s Initiative” should have a major influence on Poland as it moves towards becoming a member state from May 2004. Poland should take into consideration both its roadmap and financing methods as it determines its national priority projects. The concept of a “Polish Investment Bank” would be a possible adaptation to “Prodi’s Initiative”.

## **4.2 LEGISLATION FOR RESTRUCTURING AND PRIVATIZATION OF PKP GROUP**

Two major legislations closely related to the restructuring and privatization of PKP group were enacted in 2003. One of these is the previously mentioned law of railway transportation. The other includes amendments to the laws relating to the commercialization, restructuring and privatization of PKP

### **4.2.1 Law of Railway Transportation**

The law (Official Journal of the Republic of Poland, March 2003, hereinafter called the law) also provides other very important clauses to the restructuring and privatization of PKP group, in addition to the UTK. Some of the important clauses for the restructuring and privatization of PKP are described and analyzed below.

#### **4.2.1.1 Clause on Liquidation of Railway Lines**

The procedure for the liquidation of railway lines is provided in detail (refer to Article 9 of the law). Legal possibility to the liquidation of line is clearly prescribed, compared with Article 6 of the old law. This clause of liquidation of lines is so important to the restructuring of the PKP group.

Article 9 reads as follows;

- (1) The closing down of a railway line or a part of it shall be carried out by the infrastructure administrator under the terms laid down in Paragraphs 2-6.
- (2) If the infrastructure administrator who, after train itineraries are allocated, finds out that the income from access to the railway infrastructure does not cover the cost of providing railway infrastructure along such itineraries, shall:
  - 1) notify interested railway carriers about the intention to close down a railway line or a section of a railway line in the subsequent train timetable, should the results of an analysis of submitted applications for train itineraries confirm the deficit nature of this railway line or this section of the railway line.
  - 2) notify the relevant authorities of territorial self-government in the area where the railway line or a section of the railway line is situated about the intention to close

them down;

- 3) apply to the Minister competent for transportation to approve the closedown of a railway line or a section of a railway line; if a railway line is significant to national security, such approval shall be expressed in agreement with the National Defense Minister.
- (3) The closedown procedure may be withheld, should the relevant body of territorial self-government or an entrepreneur indicated by that body:
- 1) provide financial means to cover the cost difference not covered by the income derived from giving carriers access to a railway line or a section of a railway line.
  - 2) conclude an agreement on free-of-charge take-over of a railway line or a section of a railway line in order to continue its operation;
  - 3) join a regional transportation partnership/company which shall take over, as a contribution in kind, the railway line or a section of the railway line slated for closedown, in order to continue its operation;
- (4) Should the closedown of a railway line or a section of a railway line be not withheld under the procedure of Paragraph 3, the consent to closing down the railway line or a section of a railway line shall be issued within three months, starting from the date of the application referred to in Paragraph 2, Point 3 by the following authorities:
- 1) in regard of railway lines or sections of railway lines of state importance – by the Council of Ministers, by way of an ordinance, taking into consideration economic, social, defense or ecological considerations;
  - 2) in regard to the remaining railway lines or sections of railway lines – by the minister competent for transportation, by way of an ordinance.
- (5) Should the income derived from the sale of land and fixed assets belonging to the closed railway lines or sections of railway lines, . . . be smaller than the cost of their liquidation, the difference shall be covered by the state budget.
- (6) The budgetary appropriations for the liquidation of railway lines or sections of railway lines, referred to in Subparagraph 5, in a given year, shall be provided for by the Budget Act.

This clause is closely related with the discontinuation of train services (Article 41).

However, it seems to be prescribed independently in Article 41. Coordination of these two articles may be necessary in the upcoming amendment of the law.

#### **4.2.1.2 Clause on Financing of Railway Transportation**

Obligation of state budget to the finance of investments for the lines of national importance is provided (Article 38), including for EU Fund projects. This clause of funding investments is very important to promote the competitiveness of PKP Group.

Article 38 reads as follows;

(1) The State budget shall finance:

- 1) investments provided for by international contracts and agreements;
  - 2) investments, capital repairs, operation and maintenance of the railway lines of exclusive significance to national security;
  - 3) costs of preparation and implementation of the investments related to the railway lines of State (national) importance.
- (2) The tasks referred to under Subparagraph 1 can also be financed from the resources of the administrators, local self-government authorities and other sources.
- (3) The costs of maintenance of railway infrastructure, with the reservation of Subparagraph 1 point 2, shall be covered by the administrator, with the option of being also covered by the local self-governments and from other sources.
- (4) The funds appropriated in any given year for the tasks referred to under Subparagraph 1 shall be determined in the Budget Act.
- (5) The investments relating to the railway lines (except for the railway lines of State (national) importance) shall be financed by the administrator with the option of being co-financed from the local self-government budgets and other sources”.

This clause is a corner-stone to be observed by the government for not only PKP, but also the railway industry of the EU.

#### **4.2.1.3 Obligation of State Budget to the Subsidies to Statutory Reduced Fares (Article 39) and to Regional Passenger Services (Article 40)**

This section includes two different subsidies; (1) the subsidies to statutory reduced fares (Article 39) and (2) the subsidies to regional passenger services (Article 40).

The miscarriage of these subsidies is one of the causes of insolvency of PKP Regional.

(1) Obligation of state budget to the subsidies to statutory reduced fares (Article 39) reads as follows;

- 1) The railway transport carriers providing passenger transport services on the territory of Poland receive from the state budget an object subvention to offset their revenue losses due to the statutory reduced tariff fares in national passenger services.
- 2) The size of the subvention referred to under Subparagraph 1 shall be laid down in the Budget Act.

(2) Obligation of state budget to the subsidies to regional passenger services (Article 40) reads as follows;

- 1) The organization and subsidization of regional passenger transport services within

the public service obligation are part of the independently implemented tasks of the voivodship self-governments, and the financial appropriations for this purpose are annually stipulated by the Budget Act.

- 2) The passenger transport services referred to under Subparagraph 1 may be co-financed from the local self-government budgets.
- 3) The organization and subsidization of the passenger transport services within the inter-voivodship scope, except for the qualified transport services, are part of the tasks implemented by the minister competent for transportation affairs, who in this respect shall act in concert with the public finance minister. The financial appropriations for this purpose are annually set aside in the Budget Act until these services break even for profitability.
- 4) The tasks referred in Subparagraph 1 and 3 are implemented under contracts signed between local self-government bodies or transportation minister and railway transport carriers, . . .
- 5) A railway transport carrier pursuing other activities in addition to the public service obligation, shall be under the obligation to:
  - a) keep a separate accounting system for the transport services performed under the public service obligation;
  - b) not to spend the public funds on any operations other than those covered by the public service obligation.
- 6) The Council of Ministers, having consulted local self-government representatives, shall define by ordinance the detailed rules for determining the budget subvention, the ways and bodies responsible for transferring it to the voivodship self-governments, based on the voivodship's population, railway lines length and the risks of particularly high structural unemployment.
- 7) The Council of Ministers shall lay down by ordinance the detailed rules for the organization of the tasks referred to under Subparagraph 1 and 3, as well as the procedure for the selection of railway transport carriers, based on the principles of fair competition and protection of consumers' interests. In particular, it shall lay down: the criteria behind defining the demand for rail transport services, acceptable organizational forms of implementing such services and the criteria for the bids submitted by railway transport carriers”.

The subsidies to regional passenger services (Article 40) might be discontinued from next year by the law on revenue of local self government (October 2003).

#### **4.2.1.4 Procedure of Discontinuation of Train Services (Article 41)**

Discontinuation of train services caused social disruption several times recently.

This clause is bringing about a confusion of interpretation.

Article 41 reads as follows;



- (1) The railway transport carrier performing services within the public service obligation, as referred under Article 40, shall notify the voivodship self-government about its intention to discontinue such services at the latest 6 months prior to the new train timetable coming into force.
- (2) The voivodship self-government may refuse its consent to the discontinuation of transport services within the public service obligation, if:
  - 1) it covers the losses documented by the rail transport carrier, or
  - 2) fails to select another rail transport carrier within the procedure laid down in the regulations based on Article 40. 7.

It will be impossible for voivodship to select other than PKP Regional in Poland, this clause give voivodship a veto against discontinuation of train services. Therefore this clause should be amended soon.

It should be said that the law of railway transportation is providing the very important clauses to the restructuring and privatization of PKP.

Now, legislation of several related laws and drafting of 36 related ordinances including the regulation of TAC are under way. These legislations are not less important above mention clauses. Acceleration of these tasks is required.

#### **4.2.2 Amendment of the Law on Commercialization, Restructuring and Privatization of PKP**

(Journal of Law 2000 no 84, 2001 no 100 no 154, March 2003)

Another major legislation is an amendment of the Law on Commercialization, Restructuring and Privatization of PKP.

Main cause of the amendment was brought about by the financial crisis of PKP Regional.

##### **4.2.2.1 Main Purpose of the Amendment**

Financial Crisis of PKP group brought about the amendment of the Law on Commercialization, Restructuring and privatization of PKP. Main purpose of the amendment was to bail out the finance of the PKP Regional.

In September 2002, the loss of the PKP Regional exceeded the amount of capital of the company. In accordance with Article 23 of the Code of Commercial Company, the management board of the company immediately summoned a general meeting of shareholders on December 18, 2002 in order to pass a resolution on the further existence of the company. The extraordinary meeting of the shareholders decided on the further existence of the company and obliged the management to develop a Remedial Program.

Its mother company, PKP S.A., tried to bail out PKP Regional. For example, it asked PKP PLK S.A. to reduce Track Access Charges (TAC) for PKP Regional. And as a

consequence of the reduction, the PKP PLK S.A. fell into deficit. October 8, PKP Regional asked for a 50% increase of its initial capital from PLN 623,251 thousand to PLN 923,251 thousand. The total amount of financial deficit of PKP Group in 2002 is PLN2, 213 million. The scale of the financial crisis is beyond the capacity of the management of the PKP S.A. Proposal of discontinuation of unprofitable trains July 2003, which induced strikes by labor unions, is one of the Remedy Programs.

One of the main points of the amendment is to expand maximum value of bond issue from PLN3,900 million 2001~2002 to PLN6,000 million 2001~2004 for PKP S.A. in order to support PKP Regional.

Article 32, Paragraph 1 reads,

“On the basis of the provisions on bonds PKP S.A. shall issue bonds of the face value up to PLN 6,000,000,000 in the period of 2001-2004”.

As the result of the amendment, financial restructuring (writing-off) started including foreign financial institutions on the basis of agreements.

Some of the important clauses for the restructuring and privatization of PKP are analyzed and described from first step to third step below.

#### **4.2.2.2 Commercialization of PKP**

The original Law on Commercialization, Restructuring and Privatization of PKP was enacted on September 8, 2000 (hereinafter called the privatization law of PKP).

The first step of the privatization law of PKP is to commercialize the Polish State Railways (PKP) into the Polish State Railways Joint Stock Company (PKP S.A.), which entered to the register of entrepreneurs kept by Warsaw Regional Court. The PKP S.A. shall be subject to regulations of the Commercial Code, unless otherwise stipulated by other laws (Article 2, Paragraph 6).

PKP S.A. was established on 1 January, 2001 as a joint stock company owned solely by the State Treasury, and it succeeded all legal relationships of the PKP (Article 2, Paragraph 1 and 2). The minister relevant to transport represents the State Treasury (Article 5).

The scope of activity of PKP S.A. includes the almost all items of activities as the national and international railway transportation company including infrastructure management and train operation (Article 6 of the statute of PKP S.A.). PKP S.A. executes tasks related to management of the holding called PKP Group (Article 6, Paragraph 11, point 1 of the statute of PKP S.A.).

The organs of the company are management, supervisory board and general assembly (Article 12 of the statute of PKP S.A.).

The management represents the company. The activities of the management are defined by the regulation of the management (Article 14 of the statute).

One third of the members of the supervisory board are elected by PKP employees

(Article 4, Paragraph 1, Point 3). The representative of MOI also has the right to attend the meeting of the supervisory board (Article 19, Paragraph 3 of the statute of PKP S.A.).

The general assembly debates on ordinary and extraordinary meetings (Article 24, Paragraph 1 of the statute of PKP S.A.). The consent of the minister responsible for transport is required for the important items of the resolutions of the general assembly in the period when the state keeps the shares of the company (Article 12 of the privatization law of PKP, Article 27, Paragraph 3 of the statute of PKP S.A.).

This participation and the commitment of government are to be said necessary in order to accomplish the privatization effectively as long as the shares are held by the state. This point is very important to the government leadership.

#### **4.2.2.3 Organizational Restructuring of PKP**

PKP S.A. established the operating companies and the infrastructure management company (PKP PLK S.A.) as daughter companies (Article 14 and 15 of the privatization law). The organizational restructuring, in other words, the separation from PKP S.A. is the second step on the way to privatization following the commercialization.

Among the passenger operating companies were established as follows: the PKP Intercity in September 1, 2001 and the PKP Regional in October 1, 2001. The PKP Cargo was established as a freight operating company in October 1, 2001.

PKP S.A. established more than 40 subsidiary companies to carry out operations (Article 19 of the privatization law of PKP). Among them, 11 companies are called PKP Group and covered by consolidation of financial statements.

However, the scope of work of this study is covering only PKP S.A. (holding company), PKP PLK, PKP Cargo, PKP Regional and PKP Intercity.

On the formation of capital of these companies, the privatization law provides the following (Taken from Article 17 of the amended privatization law of PKP.)

PKP SA shall make to the subsidiaries non-cash contributions specified by the resolution of the General Assembly of PKP S.A., in the form of a set of tangible and intangible assets set aside from the company's own assets, . . . as well as cash contributions. The non-cash contributions . . . shall be made at the adjusted net book value of assets.

PKP S.A. shall contribute to PLK S.A. railway lines as a non-cash contribution with the exclusion of plots of land constituting the railway lines of unclear legal title and fixed assets under construction.

The plots of land constituting the railway lines which cannot be contributed in a non-cash form due to unregulated legal status, shall be transferred for use to PLK S.A. by PKP S.A. against no payment on the basis of an agreement.

Once the legal title of particular plots of land is cleared, PKP S.A. shall be obliged to

promptly contribute such plots being the object of the agreement in the form of a non-cash contribution.

Legal title is an indispensable factor to carry out transactions including contributions in kind.

The titles of the land assets of PKP have been fixed for only about 30%. Acceleration of the work is very much required. This issue will be touched further in the section of Asset Restructuring.

The organizational restructuring should be evaluated one of the great achievements in order to establish the principle of independence and autonomy of PKP Group Companies. However, the dominant position of PKP S.A is now becoming hazardous to promote privatization as the third step effectively. This problem will be addressed later together with the issues related to strengthening government leadership.

#### 4.2.2.4 Financial Restructuring of PKP

The serious financial difficulties of the PKP Regional before mentioned incurred the financial difficulties not only for the PKP S.A. but also for other PKP Group Companies. Chapter 4 of “Financial Restructuring” is almost completely replaced and followed by Chapter 4a of “Financial Restructuring of Liabilities” resulting from civil law transactions, which shall be restructured by agreements with creditors. However, financial analysis is not the purpose of this chapter.

Only following main point of financial restructuring shall be analyzed in this section.

The ceiling of bond issuance of PKP S.A. is enlarged from PLN 3,900 million to PLN6,000 million in the period of 2001~2004 (Article 32, Paragraph 1 of the amended law of PKP). PLN3,900 million of total bond issues may be allocated to the following items in the attached table. Note that the amount of funds allocated is not equal to the allocation ceiling. However, one thing is clear that funds required for the support of regional passenger carriage (PKP Regional) is too large to estimate in the amended law. It is listed void (Table 4.2.2.1). When the amount of expenditures may exceed PLN3,900 million, the consent of the Finance Minister is required (Article 32, Paragraph 11 of the amended law).

**Table 4.2.1 Allocation of Fund**

(Unit : Million PLN)

item	Original law	Amended law
Repayment of credits or loans	void	void
Pre-retirement Benefit	11,100	11,100
Investment	11,450	1,450
Separation of health Service units	45	45
Privatization Consultant	6	6
Cost of bond issue	void	void
Social Insurance Premium	420	420
Support for regional Passenger carriage	800	void

How to restructure the finance of PKP Group is one of the most difficult problems to be

solved before privatization.

#### 4.2.2.5 Restructuring of Assets of PKP

The PKP Group has enormous amount of assets composed of land, building and structure throughout country. In the end of 2002, Land of 108,000ha is under the control of PKP S.A.

Article 39, Paragraph 1 of the privatization law of PKP reads as follows;

PKP S.A. manages its assets in particular through,

- (1) contribution in kind to companies,
- (2) sale,
- (3) lease under civil law contracts,
- (4) disposal of redundant assets

How to utilize these assets is also one of the big obstacles in making the PKP Group profitable. However, the real estate for which the legal status has been clarified is only about 30%.

As a method of acquiring title to real estate, “clause of prescription” or “adverse possession” is provided in modern civil societies almost universally in Civil Code including Poland. *Webster’s Dictionary of the Law* states that, “Title of ownership is given to possessor accomplished by openly occupying the property to the exclusion of others and in defiance of the rights of the real owner for a period of time set by statute, typically ten to twenty years. If the owner fails to take appropriate action to oust the adverse possessor from the land within the statutorily prescribed time, the adverse possessor acquires title to the land”. In the cases of the PKP S.A., the possessor (PKP S.A.) seems to be “in a good faith belief that the land is possessor’s actually”.

The privatization law of PKP provides that “acquiring the titles shall be confirmed by the voivodship by means of and administrative decision, upon submission of related application by PKP S.A. Ultimate decision specifying the acquisition of the titles shall constitute the basis for making an entry into the real estate register and the record of lands and structures (Article 35, Paragraph 1 and 2).

Therefore, no problem is found legally in order to fix titles of real estate. But in reality, of the total length of 23.5 thousand km of railway lines managed by PKP PLK S.A., only a mere 5 thousand km has had its legal status clarified at present (Annual Report of PKP Group 2002 p.14).

This is one of the real problems of PKP Group hindering restructuring and privatization.

Article 39, Paragraph 3 reads that PKP S.A. can transfer ownership of its assets free of charge, under relevant contract, to territorial self-governing units, for purposes related to infrastructure investment in order to carry out the tasks of such units in the area of

transport.

This clause is worth special attention in the restructuring of PKP Regional in near future.

#### **4.2.2.6 Restructuring of Employment of PKP**

Restructuring of employment is a crucial point for all the related projects of PKP.

The privatization law provides the detailed clauses in Chapter 8 from amended Article 48 to Article 58.

Employees with employment relationship terminated between 2000 and 2003 shall be entitled to receive one of the following:

(1) retirement pension,

(2) railway leave,

Employees, who do not more than three years left before they are entitled to pension, in particular to railway pension, may be granted a right to take railway leave of not more than three years (Article 51). During the railway leave employees shall receive a social benefit equal to 60% of their monthly equivalent wage (Article 52).

(3) pre-retirement benefit, or

(4) one-time severance pay.

Amount of one-time severance pay is usually PLN20, 000. In the areas that exceed the average national unemployment rate, this amount is to be PLN30, 000 (Article 49).

One-time severance pay is a special benefit to the restructured employee of PKP. The expiring period (2003) shall be extended.

Former employees may be required to receive one-time training to qualify them for other employment or develop skills required to undertake self-dependent economic activity. Employees taking such training shall be covered for 20% of the cost (Article 56).

Employees shall be entitled to receive professional and social advice free of charge (Article 56).

Problems related to redundant employees will be addressed in the other chapter.

So far as first half of this chapter, the legal/organizational framework of the PKP group was analyzed and evaluated. From now on as second half of this chapter, the organizational system for strategic management of PKP group and the role of Railway Department of the Ministry of Infrastructure will be addressed from the standpoint of accomplishing the reform of PKP. The role of PKP S.A. will be re-defined to particular tasks.

### 4.3 STRATEGIC MANAGEMENT OF PKP GROUP

If the management system of PKP group companies were not established, how generous government policy could not support them effectively.

From the point of view of legal analysis, the framework of company organization seems to be established firmly.

#### 4.3.1. Legal Status of PKP Group Companies

All of PKP group companies in the scope of work have been established based on the Code of Commercial Companies of Nov. 08, 2000 (Dz. U. 94/00).

Polish Code of Commercial Companies was enacted in 1994 and amended in 2000. The code has been already been harmonized with ordinary European commercial codes.

**Table 4.3.1 Legal Status of PKP Group Companies**

Joint Stock Company S.A. Article 301-490	PKP S.A. PKP PLK S.A. PKP Cargo S.A.
Limited Liability Company Sp. zo.o. Article 151-300	PKP Regional Sp.zo.o. PKP Intercity Sp.zo.o.

Therefore, PKP Group Companies have Organs of Management Board, Supervisory Board (German like auditors), General Assembly (ordinary and extraordinary). A President or General Manager represents company individually or together with other Managers. Company management is ruled by Statute of Company and other Regulations. The governance of company is usually executed by resolution of Management Board. This management system seems to be settled into the organization of each company in short period of time since the establishment of each company.

There are two types of companies within the PKP group; Joint Stock Company (S.A.) and Limited Liability Company (Sp.zo.o).

Generally, the defining characteristic of each type of company is the size of business activity. SA is better form for the business of big scale with great number of shareholders. Minimum capital for a SA is PLN 500,000 and Sp.zo.o. must have a minimum of PLN 50,000. The companies are often established in the form of SA in order to gain capital on financial market. Only companies SA can be offered and quoted on the stock exchange.

#### 4.3.2. The Position and Function of the PKP S.A.

The PKP S.A. has taken over all legal relationships held by PKP (Article 2, Paragraph 2). It is a succession company of former PKP. The Ministry of treasury is its only shareholder. PKP S.A. insists that this company play a dominant role within PKP group (Annual Report of PKP Group 2002, p12).

Eleven companies in the PKP Group are covered by consolidation of financial

statements.

**Table 4.3.2 Consolidated Companies in the Financial Statement of PKP S.A.**

Mother Company	PKP S.A.
Passenger Railway	PKP Intercity Ltd. PKP Regional Ltd. PKP Fast Regional Rail in Tri-City Ltd. (SKM) Warszawa Commuter Rail Ltd. (WKD)
Freight Railway	PKP Cargo S.A. PKP Broad-Gauge Metallurgical Line Ltd. (LHS)
Infrastructure Manager	PKP PLK S.A. PKP Power Engineering Ltd. PKP Railway Telecommunication Ltd. PKP Information Technology Ltd.

The core tasks of the PKP S.A. are as follows.

1. Execution of restructuring, including the restructuring of human resources
2. Development of redundant assets
3. Management of financial liquidity of the companies within the PKP Group
4. Preparation of privatization projects for PKP Group companies
5. Implementation of a quality management system in accordance with ISO standards

The following is an excerpt from the annual report.

Among these tasks, the most important task is the preparation of privatization, which is the third step to final goal of the law on commercialization, restructuring and privatization of PKP. However, its privatization program seems to be faltering because of financial crisis.

Therefore, the JICA study team asked a Polish economic research expert Dr. Jacent Sierwierski to make a report "On Position of Holding in Polish Legislation, the Case of PKP S.A. Group" (hereafter, "On Position of Holding"). The argument of this section is largely depending on this report (PKP S.A. Annual Report, 12).

The dominance of PKP S.A. is now becoming rather hazardous against independent and strategic management of PKP group companies.

(1) PKP Regional fell into insolvency last year. The deficit is so huge that PKP S.A. the mother company by itself could not carry out the responsibility to bail out PKP Regional.

The following are excerpts from *On Position of Holding*.



#### Article 4

Polish Code of Commercial Companies defines a dominating company as one having obtained a majority of votes in general meeting of shareholders; or having obtained the right to appoint majority of members of management and supervisory board; or having obtained decisive influence on the activity of subordinated company

#### Article 7

The dominating company is responsible for the obligations of subordinated company towards its creditors

#### Article 3

In the Accountancy Act, the controlling influence of dominating company is defined as the ability to control of financial and operating policy of other company in order to achieve economic profits (“On Position of Holding”, 24-25).

If the PKP S.A. insists on dominance, the management of PKP S.A. should take all responsibility to the PKP Regional.

PKP S.A. may control smaller companies, but control of whole PKP group is beyond its ability.

(2) PKP group is working as it did in the past of under the former PKP. Corporate culture is not changed.

The following are excerpts from the “Position of Holding”.

Many branches of Polish economy, of which public road transport and municipal bus and tram transports have completely changed their transport markets, but the changes in rail transport are not visible for the customers except for the changes in names of companies.

Since its origin in the year 1926, PKP was always monopolistic and centralized organization managing the whole rail infrastructure, rail transports, repair plants with own health service, military functions, extended social activity etc. . . . After the war communist authorities established complete monopoly of PKP according to the principle, that all tracks and lines, even cable railways, excluding however municipal trams, are under the management of PKP. (“On Position of Holding”, 23)

The mentality of PKP-management should undergo revolutionary changes in light of the new market economy.

(3) What are the particular tasks for the PKP S.A.?

In the annual report 2001 which is the first annual report after commercialization, the PKP Group decided its Mission Statement as follows :

Mission Statement of PKP Group

Mission of PKP Group is to remain a dominant position in the market of railway services in terms of marketed economy and be up to increasing domestic and international competition throughout;

- provide transport services of top quality in passenger and freight carriages in selected segments of domestic and international market,
- provides services in non-transport business fields in order to obtain a comprehensive offer,
- set up international groupings with other entities intended to serve European international corridors,
- execute the PKP restructuring program resulted from the law on commercialization, restructuring and privatization of PKP treated as an adjustment program for PKP S.A. to standards and regulations of the European Union,
- our firm's image building as being the firm being modern, market-oriented, managed efficiently.

Strategic Objectives of PKP Group are:

- to improve competitiveness concerning transport services and gain advantage in inter-modal and intra-modal competition within these market segments, in which other operators will function(domestic and international market),
- to gain and maintain financial equilibrium in the first order, and then work out a profit assigned for development,
- to enlarge non-transport business activities to secure a comprehensive offer,
- to include PKP S.A. in the European transport system taking into consideration raising the quality of services offered to European standards.

The above-referenced Mission Statement and Strategic Objectives show that at the beginning, the PKP Group intended a market-oriented management to strive for privatization, regardless of its results so far.

All of these missions and strategic goals must be possible of being accomplished , even if without PKP S.A. In order to make the PKP group free from the past and to secure management autonomy for other PKP group companies, re-definition of the position and role of the PKP S.A. seems to be inevitable.

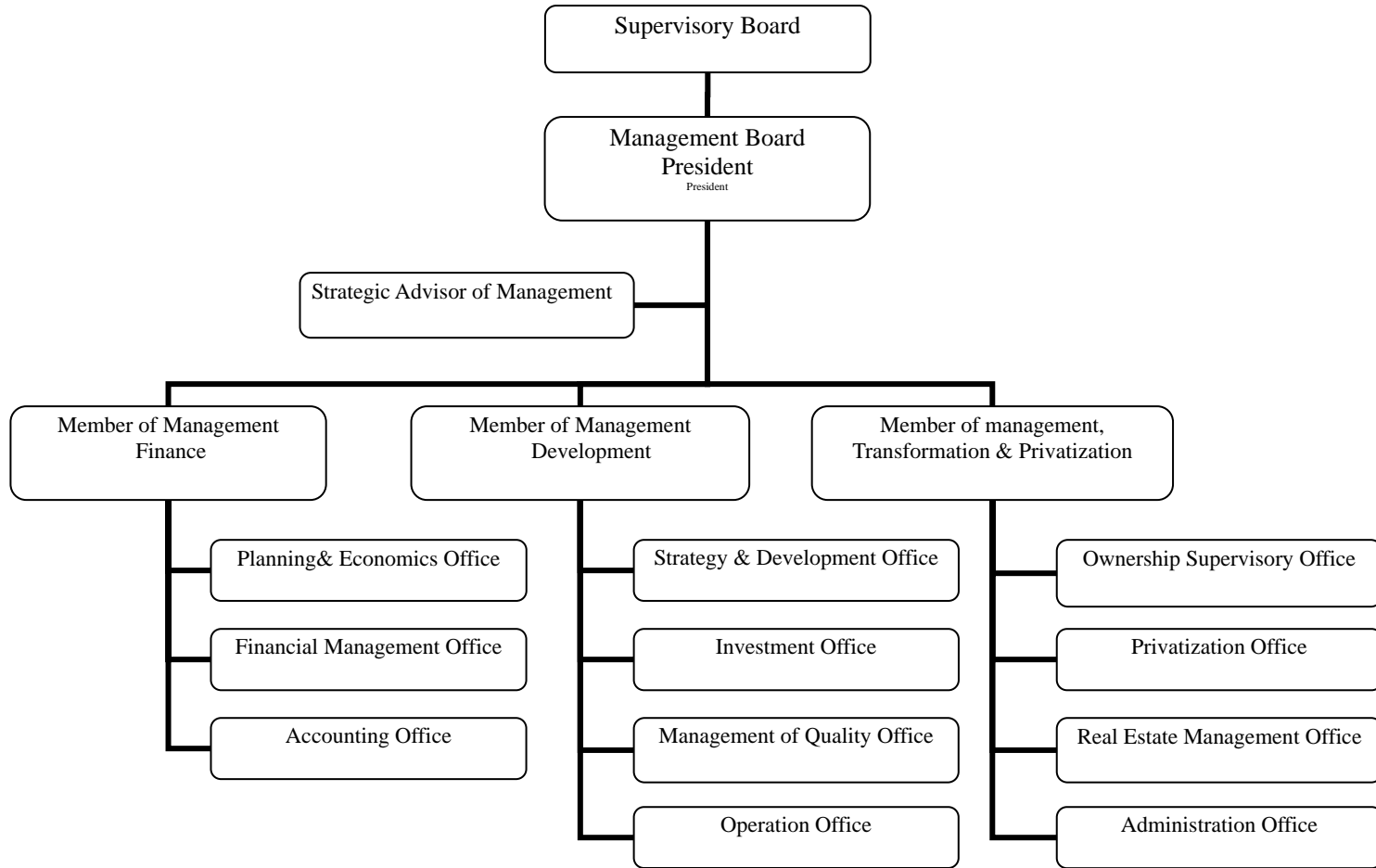
What are the particular tasks for the PKP S.A.?

- 1) Disposition of the huge amount of liability
- 2) Disposition of redundant assets
- 3) Disposition of redundant employee

These tasks are particular to the PKP S.A. Each company of PKP group is not suitable to undertake these tasks which might effect serious damage to the strategic management of each company. The task of preparation of privatization projects for PKP group companies) should be done by the government leadership. (Based on the *Annual Report 2002 of PKP Group*, 12) The government's government role will be addressed later.

Figure 4.2.1 Organizational Structure of Headquarter of PKP S.A.

November 2003



### 4.3.3 Mission Statement of PKP Cargo

#### Mission Statement

Mission of PKP Cargo S.A. is to provide services in the field of rail freight transport that meet international quality standards and safety expectations of the client for trainload, wagonload services, and combined transport as well. The following was accepted as main strategic objectives of the Company:

- build a comprehensive system of client service guaranteeing to keep dominant position in domestic railway transport,
- prepare the Company to liberalization of rail service market,
- and execute the development program securing to raise market value of the Company and to reach position of an outstanding logistic operator throughout Europe (*Annual Report of PKP Group 2001, 23*).

### 4.3.4 Strategic Statement of PLK S.A.

Strategic Statement in the PLK S.A. is defined as follows as based on its annual report.

The strategic goal of the company is to expand actions intended to strengthening position of railway transport. This will be recognition of the market and individual needs and demands of the clients in the first order. Due to these efforts, it will become possible to create new offer that would enable to use potential of the company as much as possible.

Strategy of actions taken up by the management board of the company with reference to international transport consist in increasing volume of carriage with make use of geographic location of Poland that create favorable conditions for development of transit traffic in all directions.

The action will also include consistent running modernization of rail infrastructure (*Annual Report of PKP Group 2002, 57*).

Product Statement of PLK is defined as follows

The main product of the company is train paths on a railway line made accessible, prepared on request of a rail operator, sold on the basis of economic agreements having civil-legal nature. The offer set out reflects actual capabilities of its product: technical and commercial speeds, punctuality, and reliability shown in form of passenger and freight train timetable. The Company endeavors to improve its product through maximally short times of ride on long train paths, maximally short time of transit ride, increase acceptable axle load i.e. opportunity to run heavy train, safety of ride, efficiency of service, etc. (*Annual Report of PKP Group 2002, 52*).

These statements show a clear policy of being market oriented. Performance of the statements is another issue.

#### 4.3.5 Mission Statement of PKP Intercity

##### Mission Statement

“We connect cities and people with the highest reliability and speed. We provide a comfortable center-to-center travel between agglomerations” (*Annual Report of PKP Group 2002*, 18).

##### Strategic Goal

“Strategic Goal is to make efforts towards increasing share in qualified passenger services. This is considered especially in the prospect of emerging intra-modal competition and in the aspect of tough competition from the side of other transport means. This strategic goal will encompass in particularly:

- gain a competitive advantage in transport of people at a distance from 100 to 500 km, and then unit trains up to 700km,
  - capture new client through extension of transport offer,
  - a continuous growth in clients' satisfaction with level of services provided,
  - modification of time-table in compliance with needs and expectations of the market,
  - secure safety to travelers,
  - a permanent upgrading comfort of travelling and quality services provided.
- obtain financial balance and then maximizing profit” (*Annual Report of PKP Group 2002*).

#### 4.3.6 Strategic Management in Perspective

JICA Team tried to find strategic management in the PKP Group Companies.

Almost all companies of PKP group were found to have new approaches to management of their companies for future growth.

An organization's mission is the purpose or reason for the organization's existence. It tells what the company is providing to its customers. The mission statement defines the scope of the operation of the company.

In the command economy of Socialism, employee, even management, could wait for a direction from above authority before taking action. In market economy, both management and employee need to be constantly adapting to the changing environment and customers' response.

The environment around the PKP group is changing very fast. Open Access Policy in the EU community will bring about severe competition not only with road transportation but also with new railway operators.

In order to make PKP group much more competitive with any mode of transportation,

implementation of strategic management is an indispensable measure to promote further restructuring and privatization.

Polish legislation for commercial companies has been already harmonized with the EU, and legal systems for the strategic management have been also set into the PKP Group Companies. These are great achievements for Poland.

However, the performance of the commercialized PKP group companies has not achieved satisfactory results. What is the cause of these miscarriages of the strategic management of PKP group? This serious problem needs to be addressed thoroughly.

#### **4.4 GOVERNMENT ROLE TO RESTRUCTURING AND PRIVATIZATION OF PKP**

PKP Regional fell into insolvency in 2002. It caused a serious financial crisis for the whole system of PKP Group. PKP S.A., dominant company of the Group, could not bail out the PKP Group without government leadership.

Role of government is an indispensable factor for the success of the restructuring and privatization program of PKP.

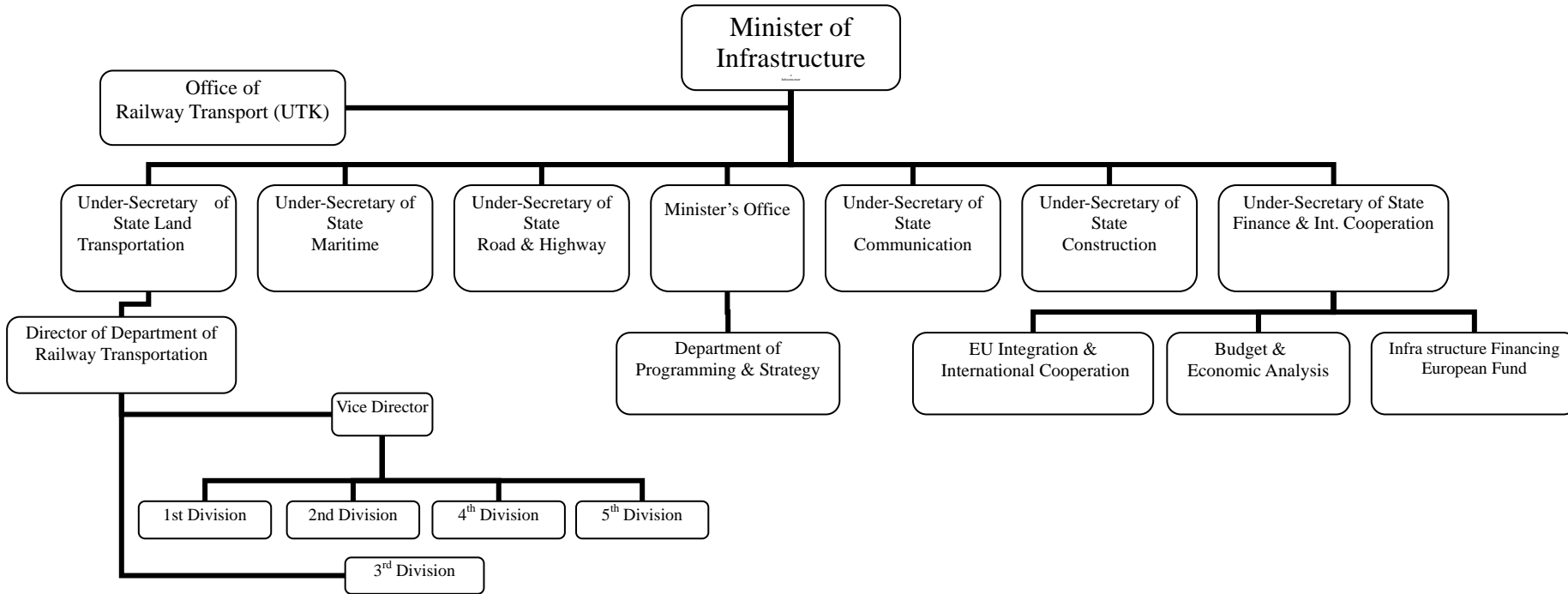
Main tasks of Railway Department of the Ministry of Infrastructure are:

“leading the cases concerning railway transport, development and functioning of Polish Railways as well as their functioning in European Community railway system, accomplishing tasks connected with PKP S.A. restructuring and ownership supervision of PKP S.A. and PKP PLK S.A.” (Regulation of the Ministry of Infrastructure).

Railway Department consists of five divisions as listed in attached organization chart. Number of working officials is 27 as of Nov. 2003, of which 25 are working positions. By comparison, the Japanese government consists of 7 divisions and has more than 180 officials.

Figure 4.4.1 Organization of Ministry of Infrastructure and Railway Department (simplified)

November 2003



- 1<sup>st</sup> Division: Railway Development and Activities Division
- 2<sup>nd</sup> Division: Ownership Supervision and Restructuring Division
- 3<sup>rd</sup> Division: International Railway Communication Division
- 4<sup>th</sup> Division: Railway Transport Technology and Safety Division
- 5<sup>th</sup> Division: Cooperation with EU Division



Core of the main tasks seems to be as;

1. Realization of restructuring and privatization of PKP group
2. Ownership supervision of PKP S.A. and PLK S.A.
3. Administration (creating, supervising and executing) of laws concerning railway transport
4. Supervision of UTK and Railway Science and Technology Center

Most of other tasks are in co-operation with the Department of Programming and Strategy, Department of Budget and Economic Analysis, Department of Infrastructure Financing and European Funds, Department of European Integration and International Cooperation, and so on.

Department of Programming and Strategy of Minister's Office consists of 11 divisions.

Some of the divisions are Strategic Works Division, Infrastructure and Transportation Development Programming Division, Investment Preparation Division, Investment Planning and Monitoring Division, Investment Supervision Division and so on.

Main tasks of the Department of Programming and Strategy are defined as;

“Participation in creating of strategy of the state concerning infrastructure development as well as formulating and coordinating transport policy of the state”(Regulation of the MOI). The important task of “formulating bases for state transportation policy concerning public railway and road transport” belongs to the Department of Programming and Strategy.

On the standpoint to promote the restructuring and privatization, strengthening the Department of Railway is an imperative factor to the responsibility of government. Without government leadership and support, the restructuring and privatization will not succeed and much more difficult crisis will be brought about in the very near future.

Reinforcement plan of the Railway Department should be implemented as soon as possible including the following,

- bringing together qualified experts not only from inside MOI but also from the PKP group. Researchers and journalists may be helpful too. During critical period, 100 people may be necessary.
- setting up its own data base of railway industry for policy making. Utilization of outside consultant firms is not excluded. Usage of electronic data exchange system is recommended.
- An external advisory committee should be set up in order to keep transparency by society. This committee may develop into working group to Supervisory Committee for restructuring and privatization of PKP set up by Prime Minister in near future. Public support is indispensable for this project.

Lastly, PKP group, especially PKP S.A., should support the activities of the Department of Railway in order to establish autonomy of their management after privatization. Labor unions should also provide support in order to keep jobs after revitalization of PKP.

Amendment of law on Railway Transportation and law on commercialization, Restructuring and privatization of PKP will be addressed in Chapter 11, Section 7 later.

## **CHAPTER 5 TRACK ACCESS CHARGE**

### **5.1 INTRODUCTION**

The Track Access Charge (TAC) is a charge paid by freight and passenger rail operators to the management of infrastructure (IM) for using the network. In accordance with Directive 91/440, all EU-members and EU-candidate states should introduce the separation of rail infrastructure and rail operating companies. The latter should pay charges for using the infrastructure.

TAC-systems are now introduced to a majority of European countries. However, excluding Great Britain, where IM and RU's (rail users) are completely separated companies, the majority of EU-countries IMs are acting within the structure of national railway holdings, although individual characteristics are different.

Polish railways have had similar experiences before the introduction of TAC-system. Under the framework of monopolistic State PKP, profitable freight transports financed unprofitable regional passenger transports. Income from the dominating freight transportation supported the maintenance of the rail infrastructure. PLK S.A. adopted this principle to the TAC-system. PKP Cargo pays considerably higher rates of TAC than the companies operating passenger trains.

PLK S.A. introduces the rates, which are accepted by Rail Transport Office (UTK) and confirmed by Minister of Infrastructure (MI). Polish rail operators of the PKP-group are of opinion that the charges imposed by PLK S.A. are very high and charging system is very complicated and un-transparent. In actual practice, rail operators sign the contracts with PLK with minimal knowledge about the detailed rules related to the setting of TAC and also without any knowledge about the conditions included in contracts with other participants (rail operators). They do not know about the specific formula used by PLK for TAC. Before its introduction TAC-system was never discussed among companies concerned.

### **5.2 PRESENT TAC IN POLAND**

The principles of the charge system in Poland are precisely explained in Railway Transport Act of March 28, 2003 (Dz. U. 86/2003, Item 789). Article 33 of this Act presents the following principles.

- IM fixes the rate of charges for the use of infrastructure by railway operators.
- The base for charge are incurred costs of track allocation, traffic control and maintenance of railway infrastructure.
- The basic charge is calculated based on planned train kilometers and unit rates, which are fixed depending on the category of line and the type of train.
- Unit rates are fixed separately for passenger transport and freight transport.

- The unit rate of the basic charge is defined as the operation of one train on 1 km.
- IM is obliged to publish the ranges and the types of basic charge rates and additional charges separately for passenger and freight transports

On the base of Railway Transport Act and Regulation of Ministry of Transportation and Maritime Economy (MTiGM) of Aug. 12, 1998 on Detailed Rules of Track Access Charges for Rail Operators (Dz. U. 111/98, item 711), PLK S.A. elaborates its Regulations of Track Access in the Framework of Time-Table (present edition for time-table 2003/2004) and Price List of its services.

### 5.2.1 Average TAC and the Special TAC by Line and by Train.

PLK-Price List 2003 includes unit rates on basic services for track access in PLN per train-km. The Price List is very extensive and specifies about 1000 separate sections divided on lines. PLK fixes the unit rate for each separate section and for each category of train. Excluding the rates used for rail buses and for PLK trains, unit rates vary from PLN 3.45 for regional trains on some sections to PLN 108.44 for freight trains TM and TG on some sections.

The charge for basic services is fixed by application as follows.

- Individually calculated unit rates (train/km) for definite train on separate section of line: the charge for the transport on definite track is the sum of unit rates multiplied by train-km for separate sections of a line.

or,

- average unit rate for definite train realized on the whole network of PLK: the charge for the transport on definite track is the product of average unit rate by the number of driven kilometers

There are following unit rates of TAC fixed as the average for the entire network usage for this year:

#### Passenger trains in PLN/train-km:

- Qualified (intercity): 13.08
- Interregional: 10.83
- Regional: 7.19
- Rail buses: 2.65

#### Freight trains in PLN/train-km:

- TX, TP, TE: 22.74
- TL, TN, TO: 14.65

- TM, TG: 25.80
- TK: 24.23

Others in PLN/train-km:

- Service, repair etc.: 3.78

The basic charge is modified by two coefficients. It is multiplied by 1.2 for the trains included in the individual timetable. The variable coefficient  $\alpha_6$ -mass is adjusted for freight trains only and is shown in Table 5.2.11:

**Table 5.2.1 Variable Coefficient**

Mass of train in tons	$\alpha_6$
to 800	0.8
800-1000	0.9
1000-1200	1.0
1200-1500	1.1
over 1500	1.2

For passenger trains  $\alpha_6=1$ .

A profit margin of 5% and VAT are added to the basic charge. The charges for complementary services are fixed on the bases of individual calculations for separate services.

PLK grants reductions in charges for rail operators in the case of intense use of rail infrastructure. The discount for freight transports varies from 0.5 to 5.0% for the transport from 1.25 million train-km monthly to 12.5 million train-km monthly. For passenger operators it varies from 1.0 to 5.5% for the transports of 1 to 10 million train-km monthly.

PLK also grants discounts for long-term clients in the range of 1% to 5% for 1 to 5 years of cooperation. All granted discounts are totaled.

In the case of extraordinary types of transport and the transport of dangerous products, PLK applies a higher tariff dependent on the type of consignment and the difficulty of the execution of the transport. In such cases the charges can be increased by 200% of basic charges as the maximum.

Reference:

Two TAC formulae are reported to be used by PLK at present as shown below.

a.  $S_{poj} = (C_{ij}) / (P_{cij}) * \beta$

$$b. S_{bij2003} = S_{bij2002} * \alpha_6 * \beta_{2002/2003}$$

where,  $S_{poij}$ ,  $S_{bij}$ ; basic charge for i-line, j-train

C: PLK cost in the previous year,  $P_e$ ; total train-km

$\alpha_6, \beta$ ; coefficient gross-ton and inflation ratio

These two formulae are published as the calculation formulae for TAC, but the application is too difficult to calculate. TAC will be discussed mainly in terms of average charges. They are calculated from the total TAC income divided by the total train-km.

### 5.2.2 Formulae Calculating TAC and the Issues in Applying the Formulae

PLK applies unit rates for a specific category of train on specific section of line. PLK argues that the unit rate is the result of the division of its costs by train kilometers made by specific train (j) on specific section (i) according to the formula: unit rate per train-km = cost  $s_{ij}$  /train km

PLK calculated train operation cost (in train-km) of specific trains on specific sections on the basis of results of OBLIKO-research made in the year 2001, and adds the adjustment of the type-classification of the trains. Acquired figures based on OBLIKO study are approximately equivalent to the cost basis of PLK S.A. that has been independently prepared for passenger and freight transport. (OBLIKO is a working group organized in PLK to calculate TAC.)

The unit rates in the Obligatory Price List includes all elements creating the charge without a detailed presentation of adjustment methods and limits the number of coefficients to only the one modifying the mass of freight trains ( $\alpha_6$ ). On this way at the fixing of the level of charge the adjustment of different coefficients expressed in specific formula is needless.

Many unit rates of TAC are applied to passenger and freight trains for the respective sections of the network. PLK offers its assurances that the following factors are taken into account when determining the unit rates for the line sections and the types of trains. These factors are: the costs of infrastructure in preceding year with inflation ratio modified by specific factors: max. speed, line density, time zone, day of week and punctuality. It is impossible to verify applied method unless primary data sources are disclosed.

### 5.2.3 Average TAC and Some Examples of PKP-railway Lines

The average unit rates of TAC are shown in Table 5.2.1. The actual unit rates of TAC for the categories of trains and sections of lines will vary. It is impossible to describe them without an elaborate explanation. However, some examples are presented below.

a. WARSZAWA CENTRALNA – KATOWICE (319.1 km) is divided into 29 sections. The length of one section varies from 1.1 km to 44.9 km. This line has a priority for passenger traffic. The unit rates, shown in PLN/train-km, for some types of trains are shown as follows.

- Qualified – from 7.24 in initial and final sections to over 30.00 in the middle sections
  - Regional – from 3.45 to 8.39 with variation rising in equal steps
  - Freight TM, TG – from 21.64 in middle sections to 108.44 in the final Silesian area; does not run through Warsaw
- b. WARSZAWA CENTRALNA – TERESPOL (211.3 km) line is divided into 15 sections with the lengths varying from 1.7 to 52.4 km, without the running of qualified trains. Regional and interregional trains are paying low rates in the initial sections and the highest rates near Siedlce (in the middle) and in the final sections. The unit rates vary from 3.45 to 9.71 for regional trains and from 3.45 to 22.20 for interregional trains. The same regularity appears in the running of freight trains (excluding Warsaw-area); TM and TG are paying from 24.86 to 77.19.
- c. WARSZAWA ZACHODNIA – KUNOWICE (475.6 km) line is divided into 33 sections with the lengths varying from 0.4 km to 45.3 km. The rates here are as follows.
- Qualified – from 8.18 (Łowicz – Kutno 45.3 km) to 38.91 (near the state border)
  - Regional – the lowest unit rate of 3.45 on prevailing sections and then increasing up to 7.75 near the border.
  - Freight TM, TG – from 24.40 (Łowicz - Kutno) to 108.44 (Poznań area) and then decreasing on the final sections (about 40 PLN)
- d. GRODZISK – ZAWIERCIE (CMK) line has 7 sections and relatively low unit rates: 7.24 – 10.22 (qualified) and 40.93 – 81.38 (TM, TG).

The examples above present many levels of unit rates for specific types of trains and specific sections. Most probably PLK took into account many factors (line density, limitations in speed etc.) when determining the individual unit rates and average unit rate in the network for different types of trains. It is difficult to know the train-km used in the calculation. Such information would be useful for the verification of calculations used in the adjustment of specific formulae.

## 5.3 INTERNATIONAL COMPARISON

### 5.3.1 Various Kinds of TAC in Calculation and Application

The charge system for the access to rail infrastructure started in European countries. The railway organization was separated into two independent companies: one for operating rail transport and the other for managing rail infrastructure. Under the EU-directives, member states of EU and their respective management organizations for rail infrastructure can fix the principles and rates of TAC with relative freedom.

There are two clear systems for covering the costs of rail infrastructure that have been applied in EU-countries. They are as follows.

- The management of the rail infrastructure calculates its prices for covering costs and

generating profit. The fixed TAC-rates are controlled and supervised by the state regulatory office. Infrastructure management organizations are excluded from subsidies, but they are possible for rail operators. In practice, this system exists only in Great Britain.

- Rail operators are not burdened by the costs of infrastructure because the full financing of the rail infrastructure is the obligation of the state government. This practice is found in Holland and in Sweden, Finland and Norway outside of EU.

The majority of EU-countries are applying mixed versions of these two clear models. Their governments support both infrastructure management organizations as well as the train operators through subsidies, but only partially. In the case of Poland, the rail operators are covering all the costs of maintenance, railway traffic and infrastructure management.

Even when there is the same level of involvement in covering infrastructure costs in any given two countries, the charges can be unequally divided between freight and passenger transport. Infrastructure costs can be relatively freely allocated between the transports of passengers and the transports of cargo. According to calculations of PLK in the year 2001 Polish freight transport covered 53.63% of infrastructure costs in the charges, while passenger transport 42.78%. The remainder, 3.59%, was paid by other operators. These differences became intensified in the year 2002.

The base for the calculation of unit TAC price for rail operators in different countries is train-km, as well ton-km (T-km) and passenger-km (P-km). Different methods of calculation mean different incentives for rail transport. The train-km system attracts the use of long and heavy trains. The P-km and T-km system attract the use of short and frequent trains. When considering international transport, the rail operator must take into account differentiated systems obligatory in different countries.

European railways generally include the following modulating parameters in the unit price, although the proportions will vary among countries.

- average or maximum speed of train on specific line
- track technical features
- gross weight of train
- contracted time
- rail traffic volume
- conditions of traffic (e. g. normal time, peak, off-peak, trains in the night)
- questions of timetable (e. g. continuity or changes in required timetable)
- punctuality expected and required by operator
- parameters relating to market reputation of operator (e. g. permanent and undisturbed cooperation with management of infrastructure)



- mode of traction (electric – diesel) generating external costs

All of the above-mentioned parameters can be (but need not be) included in the unit price by the management of infrastructure. In Germany, DB Netz differentiates between frequent and infrequent users. In Alpine-countries, such as Austria, and Switzerland, mountain routes are more expensive. In Holland, the operators of passenger trains are paying for the use of the stations (each stop separate stop at a station). In Switzerland each train pays for traction current because rail network in Switzerland is electrified in 100%. Consequently, the systems of determining prices are complicated and illegible.

A fixed component system (purchase of right to use specific part or specific section of network) is present in Germany (optional) and France (obligatory), but not present in Holland, Switzerland, Austria. In Denmark, an access charge is levied for sections that are hardly used. If the user wants to use this section, it first needs to be “made ready for use” and a fixed charge is levied to cover these extra costs.

Despite the presence of officially published unit prices, a true comparison of the rates fixed by infrastructure management in various countries would be extremely difficult given factors such as those presented above.

In addition, TAC rates are affected by a wide range of other factors, including: different structures of offered services, different capital structures, different principles of cash flows between infrastructure managements and operators, different organizational locations of infrastructure managements in the structure of railways and the level of budgetary subsidies. Moreover the management of rail infrastructure organizations are applying broad deductions in prices.

Among European countries, which introduced charges for the access to infrastructure, only Great Britain does not have a tariff based system. Instead, usage fees are based on free negotiations between infrastructure management and operating companies. Charging system is very simple, because it is freely negotiated between two parties under the control of Rail Regulator. The costs related to the railway infrastructure are financed from infrastructure charges only; only rail operators can receive subsidies.

In France, the basic principles of its complicated charging system include the following.

- Fixed monthly charge for access right on specific sections, which is dependent on the length in km. This means an access fee for the use of a specific section of the network (the right to use a section for one month).
- Variable charge per train-km that is paid as a reservation fee. This fee based on the capacity of the network. Differentiation is based on type of train (freight and passenger), time of journey (peak - normal - off-peak) and type of section (traffic density).
- Variable charge per train-km for actual use covering the use of the reserved path. It is not differentiated and its level is similar on all network sections.

Final charge (TAC) is the sum of the above three factors as well as differentiating (modulating) parameters and possible additional services.

The German charging system is rather clear in comparison to the French one. DB Netz includes the following three components in its track access charge.

- 1) A basic charge for the right to use a specific line of the network
- 2) A charge per train-km of purchased operations with modulating parameters for specific factors such as: speed, weight and traffic volume.
- 3) Extra charges, such as tracks requiring additional costs, diesel-locomotive charges, over-load charges as well as discounts for tracks with limited demand, low punctuality and others.

Rail operators are paying for the using of network (definite number of km on specific sections) and for used number of train-km modulated by different factors and complementary services.

### 5.3.2 TAC Comparison in Figures

As discussed above, the comparison of TAC is difficult because every TAC has its own specific background. Some examples of TAC in EU countries are shown below for reference.

**Table 5.3.1 Passenger and Freight TAC by Countries (2000) unit, EUR/train-km**

	France	Germany	Italy	Poland
Qualified passenger Trains: min	1.6	2.1	1.5	3.9
Ditto: max	6.4	6.1	2.5	
Local/Regional Passenger Train	10.77	3.51	7.07	2.14
Freight Trains				
Min.	1.06	1.1	1.6	4.2
Max.	1.06	4.3	2.58	7.39

Roughly speaking, in comparison to the other countries shown, Polish passenger TAC is lower for local or regional trains and in nearly the same range for qualified trains compared with the EU countries.

In freight train, Polish TAC shows higher rate than those of the three EU countries. This may give cause for negotiations between the infrastructure management and the railway operator when Poland joins the EU rail.

### 5.4 SUGGESTION OF A NEW IDEA OF TAC

According to the Restructuring Program of PKP, track access charges for use of the infrastructure are basic instruments influencing inter-mode competition in transport. In

order to create equal competitive conditions in the level of charges for the use of road- and rail-infrastructure, external costs (i.e., non-monetary costs) should also be taken into consideration. These include congestion, environmental impact, accidents, noise and climatic changes. Rail transport should be promoted because it can offer lower external costs, such as those mentioned above. However, the Restructuring Program of PKP prescribes that the charges will cover operational costs (maintenance, traffic control and administration) in the first stage with simultaneous financing of investments in infrastructure by the state, but ultimately, investment outlays should be reflected in the price of track access to infrastructure.

State authorities did not equal competitive conditions for different modes of transport in spite of incentives from EU and some innovations in last years in Switzerland, Austria and Germany. Moreover road transport in Poland has been assured financial sources for further investments through excise taxes, vignettes for trucks, toll highways and, from the next year, a fuel charge. Railways have no outer financial source for the development while some European countries have already assigned revenues from road charges for use in investments in rail infrastructure. In light of an arrangement such as this, the future burdening of IM with the costs of investments seems unfair.

#### **5.4.1 Fundamental Idea for TAC**

At present, the TAC rates applied by PLK S.A. favor passenger transport because freight transport is currently better able to pay because it has a better financial standing. However, these TAC rates need to be addressed again as the three operation companies all expect lower TAC and because of rationalization of the workforce and major investment expected from PLK.

The clients of PKP Cargo (coal and sand mines, importers of ores etc.) must pay costs based on the above policy. Statistical data forecasts a dramatic drop in the transports of some goods (cement, fertilizers, cereals, sugar beets etc.). PKP Cargo will be in a worse competitive position after the accession into EU because of foreign operators and the increasing trend toward the use of road transport in Poland.

There is the potential for a vicious cycle to start and speed up the decline of railways in Poland. That cycle is that higher TAC charges that will decrease freight and passenger transport volume, and lower transport volume that will increase TAC charges. In order to halt this cycle, PLK S.A. should become a fully commercial company in the rail market, selling a specific service and existing based on the sales from that service. Unit rates of TAC should really reflect all costs of current maintenance and traffic control. The covering of costs of investments in infrastructure should be excluded. The formula is expressed as:  $TAC = \text{maintenance costs} + \text{traffic control costs} + \text{profit}$ .

The composition of TAC (costs of maintenance and traffic control with profit margin) should refer to the actual costs incurred by each type of train on each category of line or specific sections of line, taking into account their respective differences in cost. The present calculation of TAC by PLK (as explained by them) reflects a policy to balance the costs throughout the whole PKP-group. However, the reduced rates for regional transport and higher rates for freight transport conceal this. In Germany for example, the rates for freight trains are higher than those for passenger trains. After the rail transport market is opened to the EU, TAC-rates applied by PLK will place PKP Cargo

in a more difficult situation.

PLK must always keep in mind that TAC is a product that is sold. Accordingly, the current method for establishing TAC should be evaluated based on the information presented above, such as taking into consideration the requests of the three operating companies, the new circumstances of PLK and the differences in TAC rates in EU.

#### 5.4.2 New Formula for Basic Calculation

The rates of TAC should reflect actual costs of accessibility. In the new formula shown below, the number of essential factors is reduced to the maintenance of the infrastructure and traffic control only. They are modified by coefficient  $\alpha$  representing the character of the train in terms of speed or axle load, designation as a passenger train or freight train, and  $\beta$ ; profit margin.

$$S_{ij} = \frac{k_{ij}}{L_j} (T_j + M_j \alpha_{ij}) \beta$$

where:

$S_{ij}$ : TAC for i-train on j-section

$M_j$ : average maintenance costs of j-section

$T_j$ : costs of traffic control of j-section

$L_j$ : total train-kilometers of j-section

$K_{ij}$ : running km of i-train in j-section

(p or f) $_{ij}$ : coefficient for passenger or freight trains running with specific speed and specific axle load

$\beta$ : coefficient for the profit

This new formula omits numerous coefficients from the present formula used by PLK: line density, time zone, day of week, punctuality and others. These are confusing coefficients for customers. All these factors have good reasons to be reflected to the TAC, but the formula for TAC shall be simple. All the factors that are reflected in the TAC should be shown in a table.

This new formula is clear and understandable for all present and future participants of rail market.

#### 5.4.3 Good Effect of New TAC Formula

New formula of TAC should enable a transformation of PLK S.A. from monopolistic organization working under the framework of PKP-group into an effective commercial company gaining profits through its activities. This change will animate the rail market and will induce a reduction in the level of TAC-rates.

Geographic location of Poland offers favorable conditions for bright future for rail transport, but favorable conditions must be created. A clear and understandable formula for TAC rates is one of them. Track access charges should be kept at a level that will guarantee that rail transport can remain competitive against road transport. At present, TAC rates are higher in Poland than in EU. In order to compete with EU-operators after the accession into EU, TAC rates for Polish operators should be competitive in the field of inter-modal transport.