

CASE STUDIES ON HUMAN RESOURCE ISSUES IN PRIVATE PARTICIPATION
IN INFRASTRUCTURE

RAILROADS IN BOLIVIA

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**By: José A. Valdez¹
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PART A: INTRODUCTION AND METHODOLOGY

In Latin America, privatization has been generally linked to unemployment. This link responds to the fact that many state owned companies are considerably overstaffed and during the reform process labor commonly needs to be downsized.

In a growing number of cases across countries, rationalization programs have provoked mounting opposition amongst workers that ultimately became a major obstacle in promoting and realizing private sector participation, especially in infrastructure sectors.

Bolivia is a case in point. In 1989 the country began its first attempt to privatize small and medium companies, however after three years of organized workers' opposition, the program had to be suspended.

In August 1993, the newly elected government of Sanchez de Lozada started the Capitalization Program, an alternative way to traditional privatization, involving the major infrastructure companies in energy, telecommunications and transport. Under this innovative approach, private operators would contribute resources in cash to the company – capitalizing it for investment and growth – rather than making direct payments to the State. This approach served to mitigate the level of redundancies in the newly privatized companies.

During the entire process of reform, the labor policy received top priority via a number of concrete steps. The first article of the Capitalization Law was devoted to labor participation issues. The Ministry of Capitalization organized a multidisciplinary team under an Undersecretariat in charge of labor issues including company executives and representatives of other areas of government. The design and implementation of labor policies were an important part of the terms of reference in the mandates of strategic advisors.

¹ Mr. Olaf Smulders and Sunita Kikeri significantly contributed to this study in the design, gathering and treatment of the information as well as in its final content. José A. Valdez was former Undersecretary for Investments at the Ministry of Capitalization in Bolivia.

Implementation of labor policies during the capitalization of the Empresa Nacional de Ferrocarriles (ENFE) followed the same general guidelines that were applied to the rest of companies in the infrastructure sector. Each company started with a defined strategy in large part devised by external technical and financial advisors. At a later stage, a group of local consultants together with medium-level company executives and representatives of other ministries and government agencies implemented the strategy.

Given the difficult economic situation of ENFE, and in order to assure the presence of bidders, the government had to downsize substantially the work force. Capitalization of the railroad sector proved to be the most difficult process among the various companies, it required a lot of effort and resources to complete the transaction and assure a peaceful transition of administration.

The present paper presents the main outcomes of this process focusing mainly on the railway company but relevant experiences in the various other capitalized/privatized companies such as hydrocarbons, electricity, telecommunications, etc. will be cross referenced.

The report relies greatly on first-hand interviews and field visits to the main stakeholders². Recent research identifying the results of the five-year execution period of the capitalization reform was made available in some cases through preliminary versions. Regulatory agencies, with their growing collection of valuable information, were one of the main sources for the study and for the discussion of preliminary findings.

Interviews involved labor unions in the cities of La Paz and Santa Cruz, private companies operating in the Andean and Eastern Networks, regulatory agency officials from SIRESE (General Regulatory Agency), Superintendence of Transport, government officials and World Bank experts on labor programs during privatization.

The report is divided in three sections: i) a general presentation of the transaction, ii) a description and analysis of human resource issues during the transaction, and iii) a brief presentation of lessons learned from this experience.

The first section includes brief information about the company prior its capitalization, a description of the capitalization process, and principal results since ENFE was transferred to the private sector. The second section presents the reform process in three stages with a description of human resources prior its capitalization, the labor reform process carried out during capitalization and the results achieved in terms of employment, productivity and level of compensation.

The final section presents specific aspects that illustrate good labor policy practices applied in the capitalization of the railroad sector.

² A detailed list of meetings and interviews is presented in the Annex Section.

PART B: SYNTHESIS OF KEY FEATURES AND DATA ON THE PPI TRANSACTION

THE COMPANY

The National Railroads Company (ENFE, Empresa Nacional de Ferrocarriles) was created in 1964 incorporating the privately owned network in the western part of the country built at the beginning of the century (Andean Network) and the Eastern Network built by the government during the early 40s to connect the city of Santa Cruz to the Atlantic through Brazil and Argentina.

The Andean Network with 2,082 km., connects the cities of La Paz, Cochabamba, Oruro, Potosí and Chuquisaca, with four export gateways: i) to Guaqui connecting with the ports of Matarani and Mollendo in Peru, ii) to Charaña connecting to the port of Arica in Chile, iii) to Avaroa connecting to the port of Antofagasta in Chile and iv) to Villazón connecting to Argentina.

The Eastern Network with 1,359 km., links the cities of Santa Cruz with the city of Corumbá in the Brazilian border and from there to the ports of Santos and Paranagua. A second branch from this line extends to the city of Yacuiba in the Argentinean border.

Each network differs considerably from each other. The Andean operates in rugged terrain, steep slopes at altitudes between 6 thousand to 13 thousand feet above sea level in areas with mining production. The Eastern railroad runs through vast planes with tropical agricultural production mainly of soybeans. Road competition is more intense for the Andean Network than for the Eastern Network where the railroad is the only way of transport during rainy season.

Poor maintenance of the track and a higher expenditure in roads transformed the sector bringing the participation of freight transport by rail from 48% in 1965 to 8% in 1992.

Prior to its capitalization in 1995, ENFE had an outstanding debt of US\$ 240 million accumulated in a period of 8 years. Due to the subsidized price policy and the poor management, the company worsened their financial ratios reaching in 1995 a level of operating costs 138% higher than operating income.

CAPITALIZATION OBJECTIVES AND STRATEGY

In 1994 the Capitalization Law included the railroad company as part of the sectors to be reformed. The reform included the following objectives:

- Restructure the railroad sector allowing the introduction of private participation in the ownership and management of the company eliminating political interference in all functions of the company.
- Strengthen the sector by attracting fresh capital for investments in infrastructure and operations.
- Revert the course of decline particularly of the financial situation eliminating distortions in tariff fixing and leaving the competition to the market allowing the establishment of tariffs and incentives to improve the operational development.
- Reduce dependence of government compensations and generate transfers to government by means of corporate taxes.
- Offer better and safer options to international trade particularly for the Bolivian export sector.
- Promote Bolivia as a link between the ports of the Pacific and the Atlantic

ENFE's capitalization strategy included the transfer of integrated operations and management of railroad activities to the private operator including marketing activities, operation and maintenance of rolling stock and fixed installations such as tracks and remaining infrastructure. The newly capitalized company would have the responsibility to make necessary investments to ensure the improvement and expansion of railway services and capacity.

The new company would operate free from all political intervention. The role of the state would be limited to the supervision of contracts and regulations for segments where competition would be absent. The company would be managed by the strategic partner with 50% of the shares subject to the terms agreed in the management contracts signed between shareholders and the State represented by the Superintendence of transports.

THE CAPITALIZATION PROCESS

The Capitalization of ENFE involved the creation of two separate companies corresponding to each of the networks. Each company was assigned assets corresponding to real state directly related to the operation, rolling stock, repair shops, communication and spare parts stocks. Each company was awarded licenses for 40 years to use tracks and all infrastructure related to operation.

Due to legal requirements, each company had to be first transformed into a mixed capital corporation with the participation of workers who were offered shares at

preferential prices. Newly created companies then increased its capital inviting private investors to bid for a package of shares equivalent to 50% of total number of shares for each company.

Social liabilities corresponding to workers assigned to each company were also transferred. The total debt transferred to each company resulted in US\$ 11.7 million to the Andean Railroad and US\$ 5.8 million to the Eastern Railroad.

The private participation process included 7 main steps:

- (a) Assessment of book value according to international accounting standards;
- (b) Conformation of mixed capital corporations for the Andean and Eastern networks;
- (c) Public offering of a share option package for workers;
- (d) Issue of new shares equal to 100% of paid capital
- (e) Offer of shares by international public bidding to select the strategic partner (who would later be entitled to 50% of the new company);
- (f) Establishment of the Superintendence of Transports to regulate railroad operations.
- (g) Selection of the strategic partner and closing.

The selection process included several open consultations with potential investors in seminars held in La Paz and Miami including topics related to labor issues along with other legal, technical and financial matters. A team of consultants was formed including (a) an strategic advisor in railroads to define the details of the transaction, (b) an investment bank in charge of the design and promotion of the transaction; (c) an accountant firm to value the assets; (d) an audit firm to prepare the balance sheets; (e) a legal firm for specialized work on legal matters; and (f) individual consultants to provide specialized advice on specific aspects and comments on drafts of contracts and bidding documents.

The bidding process included two stages. During the first stage a number of companies submitted credentials to pre-qualify, 14 companies bought the terms of reference after paying US\$ 2,500 each. Eight companies submitted proposals and 7 were pre-qualified to submit financial proposals.

Pre-qualification criteria included: (a) proof of technical and operational capacity in the railroad sector, by themselves or through an agreement with specialized companies; (b) proof of managerial capacity consisting of credentials of the company including levels and years of experience providing railroad services and results obtained; and (c) proof of company's ability to face financial obligations if selected.

In September 1995, pre-qualified companies received bidding documents and draft versions of contracts including concessions, licenses, subscription of shares and

management contracts. During the following three months, companies could access data rooms and express their views relative to contract terms including labor issues.

On December 14th 1995 in a public ceremony broadcasted live by radio and TV, only two companies submitted the documentation to bid for both networks. One of the companies was disqualified due to mistakes in their proposal and its unopened economic proposal returned. The financial proposal of Empresa Cruz Blanca S.A. was opened and submitted to the Executive Power with a recommendation to be accepted.

The economic proposal for both networks combined an offer of US\$25.85 millions for the Eastern Network (US\$1.15 above the book value) and US\$13.25 millions for the Andean Network (US\$ 15.75 below book value). According to procedures outlined in the bidding documents, the ministerial cabinet reviewed the results of the economic offer and issued a Supreme Decree accepting the transaction.

Three months later, both companies received the combined deposits of capitalization of US\$39.1 million and the strategic investor received in exchange the newly issued shares package. After signing contracts and obtaining approvals from board meetings, the new operator took control of the company and started to operate. Before the closing of the transaction, the Superintendent of Transports was appointed by the President of Bolivia from a list of candidates submitted by the Senate.

REGULATORY FRAMEWORK

In order to modernize the regulatory framework, three supreme decrees were enacted to complement the transport law of 1910, (a) Supreme Decree 24177 reinstated the control by the government of infrastructure directly related to rail transport such as rail roads and train stations, ratifying its nature of being indivisible and totally protected by law; (b) Supreme Decree No.24178, that allows the establishment of the Superintendence of Transports as the regulatory agency that defines the supervision responsibilities of the sector; (c) Supreme decree No.24179 that regulates the supply of public services of railroads within the law of the Regulatory System.

Supporting the regulatory framework, various contracts were part of the contractual obligations of the private company with the regulatory system such as: i) Concession Contract establishing a regulatory charge equal to 0,5% of total income as a payment to the State through the Superintendence of Transports, ii) License Contract awarding the rights to use and exploit all assets needed to operate railroad public service for 40 years, with a payment of 2,2% of gross annual income, iii) Lease Contract for passenger rolling stock with a payment of 2.5% of rolling stock, iv) Share Subscription Agreement establishing the increase of capital and the share ownership structure fixed for 7 years of operation or until all committed investment is fully executed, and v) Management Contract that defines the board structure and roles and responsibilities of members.

MAIN RESULTS

Investments by both companies were subject to a capitalization contract that defined a maximum period of five years to execute the total committed investment and a maximum percentage of 20% for operating expenses with the rest to be spent in investment.

Both companies executed committed investments before the term defined in the contract and as in shown in Table 1. In both cases, additional investments were financed by company profits without modifying the ownership structure. Eastern Network results in 2001 show that the company has executed investments equivalent to the double that originally was committed for capitalization in 1995.

TABLE No. 1
INVESTMENTS IN CAPITALIZATION
(In \$us millions)

	Committed	Executed (1)	Additional Investment
Andean Network	13.3	15.4	16%
Eastern Network	26.0	53.0	104%
Total	39.3	68.4	74%
Other Capitalized Sectors			
Electricity	139.8	164.5	18%
Hydrocarbons	834.9	1,292.7	55%
Telecommunications	610.0	610.0	0%
Total	1,584.8	2,067.2	30%
Grand Total	1,624.0	2,135.6	31%

Source: Annual reports of Andean and Eastern Networks, Ministry of Foreign Trade and Investment.

(1) Andean 2000, Eastern 2001

Other capitalized companies have also seen better than expected investments results mainly in the energy sector. The gas pipeline project to Brazil and electricity export projects in the eastern part of the country explain this result. Overall, capitalization investment results from all sectors have surpassed expectations in more than a third with the Eastern Network as the most performing company amongst all capitalized companies.

TABLE No. 2
RESULTS OF CAPITALIZATION OF ENFE

	BEFORE	AFTER	VARIATION
Net transfers of funds to the State \$us Mill (1)	-16	17.48	209%
Average tariffs \$us/MT (2)	23	17	-26%
Derailments (3)	753	319	-58%
Failures of locomotives (4)	552	318	-42%
Consumption efficiency liters of diesel/Ton-Km (5)	25.58	18.33	-28%
Transport of passengers (000) (6)	291	460	58%
Transport Units/Employee per 1,000 (7)	200	1,170	485%
Employee-km/route (8)	1.65	0.31	-81%

Sources: Salinas Luis Fernando, et al, *La Capitalización. Cinco años Después*, Fundación Milenio, 2002. Seminar on Capitalization Confederation of Enterprises, Cochabamba Bolivia, 2000, World Bank Transport Database

(1) Both networks, 1991-1995 and 1996-2000. Includes a surplus both for the Andean (\$us Mill. 9.26), and for the Eastern (\$us Mill. 26.25) and a deficit for ENFE Assets and Services of \$us Mill. 18.04. (2) Andean Network for 1992-1995 and 1996-2000 (3) Andean Network for 1992-1995 and 1996-2000 (4) Andean Network for 1992-1995 and 1996-2000 (5) Andean Network for 1992-1995 and 1996-2000 (6) Eastern Network for 1992-1995 and 1996-2000 (7) Average of both networks, 1991-1995 and 1996-2000

Table 2 shows various results obtained by both companies exemplified by: the reversion of transfers to the State through the increase of taxes and contributions, tariff reductions and better operating indicators. The Eastern Railroad fared better due to the absence of road transport competition and the the construction of the Santa Cruz-Sao Paulo gas pipeline during 1998-2000.

* * *

PART C: DESCRIPTION AND ANALYSIS OF HUMAN RESOURCE ISSUES

COMPANY LABOR SITUATION PRIOR PRIVATE SECTOR PARTICIPATION

At the time of its creation in 1965, ENFE had 6,352 workers 5,834 assigned to the Andean Network and 518 to the Eastern Network. In 1993 the number of employees was reduced from 6,500 employees to 5,400 and by the time of its capitalization in 1995 to 3,916, with 2,488 workers in the Andean Network and 1,428 workers in the Eastern Network.

ENFE's organizational structure included a Board of Directors and a General Manager. In 1993 an Executive President position was created. Under the General Manager position, three Operational Management Units were created for operations, administrative work and marketing. The Eastern Network had its own management team including a General Manager and three operational management positions. These positions reported directly to the Central Office in La Paz, but in practice the Eastern Network operated as an independent unit with the exception of management of financial resources.

a) Work Force Structure Prior to Capitalization

As shown in Table 3, a great proportion of workers in both networks are in the range of 31 to 40 years old (41% in the case of Andean Network and 37% in the case of the Eastern Network) with an average of 41.4 years for the Andean and 40.4 years for the Eastern. The participation of women as employees in the railroad sector in Bolivia was very limited with a maximum of 7% of the total work force in 1995 for the Eastern Network. The level of education of workers was relatively higher in the Eastern Network with more than half of its workers with technical and educational degrees compared with a third in the Andean Network with certification of technical degree.

TABLE 3
CHARACTERISTICS OF ENFE'S LABOR FORCE PRIOR ITS CAPITALIZATION (1995)

GENDER	ANDEAN NUMBER	%	EASTERN NUMBER	%
Male workers	2,364	95%	1,322	93%
Female workers	124	5%	106	7%
Total	2,488		1,428	
EDUCATION				
Technical degree or more	821	33%	741	52%
No degree	1,667	67%	687	48%
AGE				
Less than 20	25	0%	9	1%
21 to 30	149	6%	190	13%
31 to 40	1,020	41%	522	37%
41 to 50	970	39%	497	35%
More than 51	324	13%	210	15%

Source: Database ENFE for SOCIMER/INECO

The labor structure in terms of its occupational category is shown in the following table with the biggest percentage allocated for the operation categories of track maintenance, construction traffic and movement.

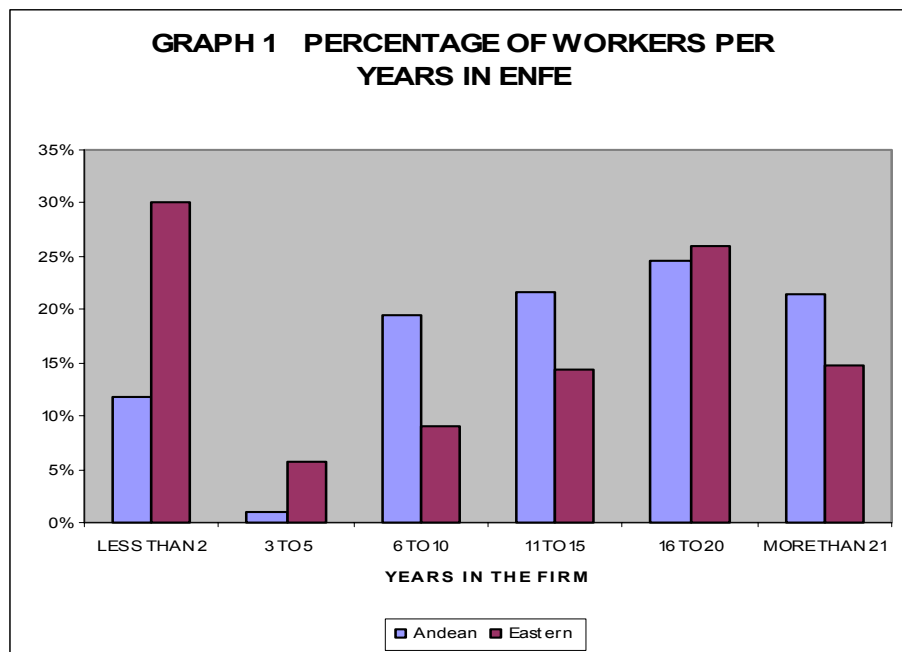
TABLE 4
LABOR FORCE STRUCTURE PRIOR CAPITALIZATION

CATEGORY	REF. SOC./INE.	ANDEAN NETWORK		EASTERN NETWORK		TOTAL	
Administrative	12%	594	24%	316	22%	910	23%
Track and construction	22%	656	26%	405	28%	1,061	27%
Traffic and movement	60%	694	28%	455	32%	1,149	29%
Mechanics	7%	544	22%	252	18%	796	20%
TOTAL	100%	2,488	100%	1,428	100%	3,916	100%

Source: Socimer/Ineco Report November 1995

Administrative staff in the Andean Network as shown in Table 4 was 24% of the total workforce. This percentage is high when compared to an optimal standard of a similar size company as suggested by the financial advisor SOCIMER/INECO. On the other hand, for the traffic and movement categories, a similar “ideal” operation would have a proportion twice as big as the one for both networks in 1995.

The fact that most administrative and mechanical categories are overstaffed can be explained by the political pressure felt by different administrations to hire workers in cities or semi urban towns rather than those based in the countryside or rural areas such as track, construction, traffic and movement.

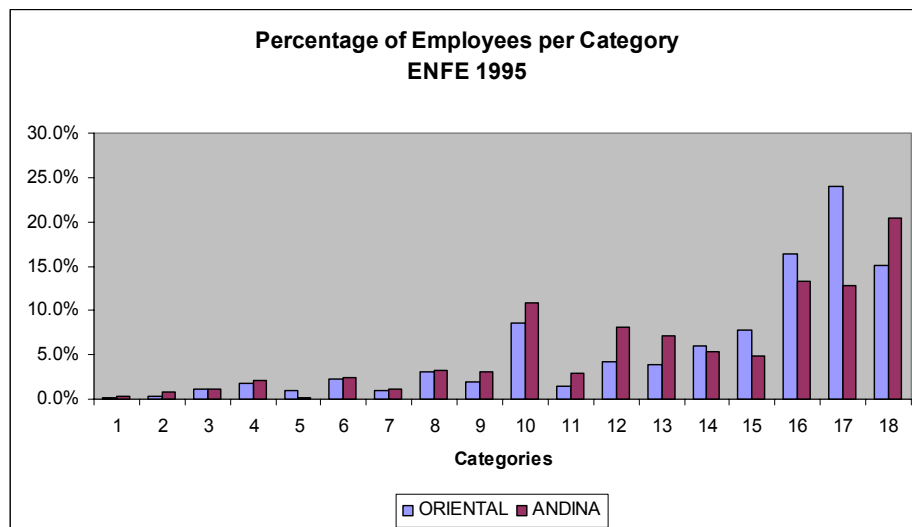


Source: Socimer/Ineco Report November 1995

The political influence factor hiring personnel can also be seen in Graph No. 1 where almost 25% of the workers in the Eastern Network were engaged after the new administration took place in August 1993. Successive directors at a national and regional level belonged or were appointed by the influence of the UCS party (Union Civica Solidaridad) that was in charge of the transport sector and whose main base was in Santa Cruz, headquarters of the Eastern Network.

As can be seen in the next graph, more than half of the workers in the oriental network (56%) belonged to the lowest three categories (drivers, laborers, rail repair, assistants) compared to 47% in the Andean network.³

GRAPH 2



Source: Socimer/Ineco Report November 1995

This indication of relatively more stable labor situation in the Andean Network is confirmed when comparing the number of years of work in the firm. A proportion of 68% of Andean workers stayed more than 11 years in the firm vis-à-vis 56% of workers with the same number of years in the Eastern Railroad.

b) Labor Productivity

Some indicators of labor productivity compared to other countries as in Table 6 show that the Andean Network in 1995 had the lowest ratio of Transport Units/Employee together with CEARC from Malawi. The Eastern Network has the second best indicator

³ Categories involve the following responsibilities: 1-2 Director, 3 Chief of Department, 4-5 Chief of Division, 6 Technical Staff, 7 Locomotive Inspector, 8 Chief of Mechanics, 10-12 Train Conductor, Mechanic, Ticketing Responsible, 13 Chief of Station, 14-15 Driver, 16 Chief of Laborers, Telephone Operator, 17 Rail Repair, 18 Rail Maintenance. A clearer explanation of different categories is given in Table 7 presenting the wage structure.

after EFE in Brazil when compared to state owned companies in developing economies but significantly low compared to industrialized countries.

TABLE 5
LABOR PRODUCTIVITY INDICATORS BEFORE PRIVATIZATION

	TU*/ Employee	Employee / km of Route	Compensation**as % of Total Revenue
Andean Network (1)	0.13	1.92	59%
Eastern Network (2)	0.28	1.45	37%
ENAFER (Mexico) (3)	0.20	2.32	33%
Central East African Railways Comp. (Malawi) (4)	0.04	3.83	70%
EFE (Brazil) (5)	0.37	1.19	42%
Ferrocarriles Argentinos (6)	0.19	2.70	147%
USA Amtrack (7)	0.38	0.61	61%
Canada Via Rail (7)	0.36	0.27	102%
Germany (7)	0.42	6.56	132%
France (7)	0.56	5.80	82%

Source: Railways Concessions Database, World Bank

*TU - Traffic Unit = net freight tone-km + passenger km.

**Compensation: Total wage payment without including social benefits

(1) Average 1986-1995 , not available in some years, (2) Average 1986-1995 , not available in some years, (3) Average 1990-1996, not available in some years, (4) Average 1991-1995, not available in some years, (5) Average 1986-1993, not available in some years, (6) Average 1984-1991, not available in some years, (7) Average 1986-1997, not available in some years. .

One of many particularities of the railroad sector as shown in the previous table is the difficulty to compare performance indicators between systems to get accurate evaluations, especially when reviewing labor indicators. Many systems, particularly in Europe, show good indicators in terms of employee productivity but poor indicators when analyzed the deficits incurred to meet workers compensations.

c) Wage and Benefit Structure

The wage and benefit structure aggregated for all workers in both networks is presented in Table 6. The basic wage represents 60% of the total compensation. The average monthly wage of US\$ 274 for 1995 is equivalent to 6.4 times the national monthly minimum wage equivalent to \$us 42.8. The biggest component for the wage structure is the seniority bonus followed by the bonus of the end of year equivalent to more than a quarter of total compensation. The family allowance benefits include birth grants consisting of a one national monthly minimum wage per child, nursing allowances including a monthly milk allowance for each child for 12 months following birth paid in kind and a burial allowance equivalent to a one national monthly minimum wage per child under 19.

TABLE 6
WAGE STRUCTURE IN ENFE
(Andean and Eastern Networks, 1995)

	TOTAL AMOUNT (US\$ Millions)	PERCENTAGE
Base Salary	7.75	60.2%
Seniority bonus	3.47	26.9%
End of the year bonus	1.11	8.6%
Family support	0.23	1.8%
Per diems	0.05	0.4%
Other, overtime, bonus	0.26	2.1%
TOTAL	12.87	100%

Average monthly wage (US\$) 274

Source: Ministry of Finance, General Accountant Office, Executed Budget

There were at least 12 levels of wages for ENFE workers as shown in Table 7. The difference between the highest paid and the lowest paid in December 1995 was 7.4 times. The lowest basic wage in the company was 4.6 times the national monthly minimum wage established by the Ministry of Labor in 1995.

TABLE 7
CATEGORIES AND WAGES
ANDEAN AND EASTERN NETWORKS
(December 1995, in US\$)

	Categories	Basic Wage	Total Wage
Director	1-2	927	1,446
Chief of Department	3	507	791
Chief of Division	4-5	394	615
Technical Staff	6	252	393
Locomotive Inspector	7	221	345
Chief of Mechanics	8-9	192	300
Train Conductor, Mechanic, Ticketing	10-12	151	236
Chief of Station	13	131	204
Driver	14-15	129	201
Chief of Laborers, telephone operator	16	127	198
Rail Repair	17	126	197
Rail Maintenance	18	125	195

Source: Ministry of Capitalization, 1995, Database prepared for SOCIMER

Workers in the railroad sector contributed to social security under the pay-as-you-go system and continued to do so (those that remained in the remaining ENFE Assets and Services) until November 1996, one year after the Capitalization of the railroad sector. The system was based on contributions of current income recipients and expenditures consisting of payments to pensioners.

The average contributions for ENFE workers was 14.8% of salary including 4.5% as workers contribution to the Basic Pension Fund, 1.5% as employer contribution to the

Basic Pension Fund and a 8.8% as workers contribution to the supplementary fund.

PENSION REFORM IN BOLIVIA

Until 1996 Bolivia had a pay-as-you-go pension system where contributions of current income recipients were used to pay pensioners. There were 120.000 retired people receiving average monthly payments of US\$ 130. Total yearly payments added up to US\$ 187 million (3% of GDP). Contributions from 343.000 workers could not afford the payment of pensions. The system needed an annual Treasury support of US\$ 13 million.

Workers contributing to the system represented 23% of workers in the urban areas and 11% of active population. The dependency ratio between contributors vs. retired pension beneficiaries was 3 to 1. Pension payments came from two sources: a) 42% corresponding to a basic payment financed by the Basic State Pension Fund (FOPEBA) administered by the state and b) 58% from supplementary pension funds most set up to supplement the basic state allowance, mostly managed by workers.

In 1996, 36 supplementary funds were registered from sectors such as banks, railroads, universities, mining, etc. Only 9 funds operated with acceptable financial indicators.

The new Pension System

The new pension system implemented by two selected pension fund managers include two components: a) the "collective capitalization fund", created with 50% of shares in the capitalized companies; and b) the "individual capitalization fund", composed of the accounts of Bolivian citizens that contribute to the pension system.

The new system comprises programs with three types of benefits:

- a) *Pension Program*, compulsory for employed persons and voluntary for self-employed persons. The program is defined by contributions made by the employee with no upper limits on the amount that can be accumulated in individual pension accounts. Workers contribute 10% of their monthly income to an individual retirement account, contributions are deducted from salary and paid to the AFP.
- b) *Social Insurance* including common disability insurance and professional disability insurance.
- c) *Basic Social Security* that covers all Bolivian citizens who were 21 years or older as of December 31 1997, over the next 60 years (approximately 50% of the total population). The Program funded by the Collective Capitalization Fund has shares of capitalized enterprises. The benefit called BONOSOL consisted of an annual payment initially set at US\$ 250 for all resident Bolivian citizens 65 and over. The program also included a uniform death benefit payment.

Transition to the new system

After November 1996, all existing pensions programs ceased operations and the government proceeded to liquidation, collection of debts and payment of pensions to already retired persons. The implicit deficit of the previous pension programs has two components: a) obligation to meet payments to persons already retired and b) Recognition of past contributions to the pay-as-you-go pension system.

Compensation for previous contributions are based upon a formula defined as 2.8% of the salary as of October 1996 times the number of years that contributions were made. The government will pay compensations once the contributor starts receiving his pension. Deficit is funded by proceeds from liquidation of assets and government bonds with 15-year maturity, 8% of interest rate. The AFP using the new contributions coming into the individual retirement accounts purchases these bonds. The fiscal deficit in 1997 was approximately 3% of the GDP, it is expected to grow up to 3.5% by 2010 and decline thereafter to completely disappear in the year 2060.

d) Union Organization

Railroad workers in Bolivia have traditionally had one of the strongest union movements. His relatively large number of base workers and its dissemination around the country made them one of the most active and effective forces in the union movement in Bolivia. Districts located in main intersection routes such as the city of Oruro and the towns of Uyuni and Viacha have frequently exerted pressure on governments leading various opposition movements.

In 1995 ENFE unions were organized in 9 regional associations in the cities of La Paz, Oruro, Uyuni, Cochabamba, Potosí, Sucre, Viacha, Guaqui and Tupiza. Four regional federations represented the unions: Western Network Federation, La Paz Federation, Southern Federation and Eastern Federation. Additionally, there were two associations for train operators.

The National Confederation represented all railroad workers and was composed by 8 members with a General Secretary, 5 secretaries representing each of the federations and 3 other members in charge of the conflicts and external relations.

By the time of the company capitalization, the political governing coalition had certain influence on four unions (La Paz, Sucre, Viacha and Tupiza), two other were politically independent (Potosi and Train drivers) and relatively in favor of the government and three unions were opposed to government policies 2 of them associated to opposition political parties (Cochabamba and Guaqui) and one independent but radically opposed to government (Uyuni).

Main issues raised during negotiations were those related to specific aspects for each region and mainly concerned to housing and land distribution as was carried out in previous experiences. There was no contract negotiation or a specific proposal of wage policy to be carried out by the future operator.

The Negotiation Process In Enfe

The labor restructuring process was characterized as being of a very intense negotiation with different unions, federations and the confederation. During the process, the representation of workers was tensioned in various occasions with strikes and blockades. Individual negotiations with unions or federations took place instead of a single negotiation with the National Confederation. As shown in the table below, the most conflictive period was in December during the last days of the bidding process.

The negotiation process continued in 1996 and even in 1997 with specific unions such as the one in Uyuni to solve problems of blockades.

A Sample Of The Agenda 8/95-8/96

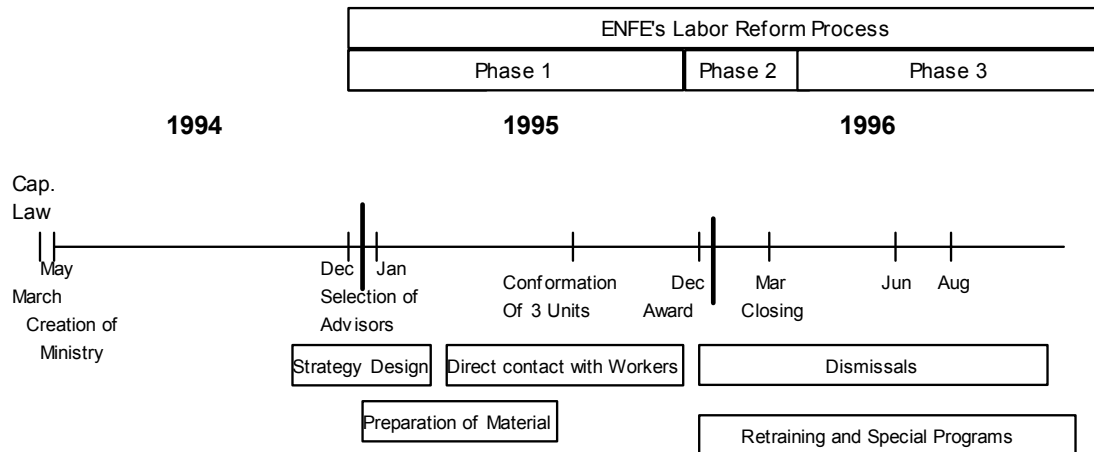
LABOR NEGOTIATION PROCESS

EVENT	DATE	TIME	PARTY	PLACE	ISSUES
Agreement	8/15/1996		Uyuni Union	La Paz	Special training program for Uyuni including driving lessons, welding, electromechanics, car repair, plumbing, electricity repair and others.
Commitment	8/13/1996		National Confederation	La Paz	Reincorporation of dismissed workers and suspension of legal process against them.
Memo	2/21/1996		Cochabamba Union	La Paz	Price of land for housing based on book value determined during the process.
Agreement	2/12/1996		National Confederation	La Paz	Labor continuity, payment of social benefits in 15 days, payment of debt to social security.
Agreement	1/26/1996	3:00 PM	National Confederation	Santa Cruz	Ratification of agreements of December 20 1995, payment of social benefits for special cases, keep level and rank of employees with new operators.
Agreement	12/20/1995		Western Federation	La Paz	Labor continuity, 7 months of labor stability, land titles and housing projects, suspension of blockade and strike, 24 months labor stability in ENFE Assets and Services, payment of bonus 1991, 1994, family allowance debts.
Agreement	12/13/1995	1:30 AM	Cochabamba Union	Cochabamba	Land titles and procedure for purchase, labor continuity and 6 months of labor stability with new operator.
Letter	12/12/1995	2:00 AM	Uyuni and Atocha Unions,	Stril Uyuni, Potosi	Arrival of Ministers, suspension of strikes, suspension of police control, payment of debts of family allowances, clothing for work.
Agreement	12/10/1995		Uyuni Union	Uyuni, Potosi	Suspension of police surveillance, inviting moderators, payment of bonus 1991, 1994, payment of clothing for work.
Agreement	11/28/1995	5:00 AM	National Confederation	La Paz	Labor continuity, social benefits, land and houses, payment of bonus 1991, 1994, family allowance debts.
Agreement	8/23/1995		National Confederation	La Paz	Increase of wages, increase of perdiems, payment of clothing for work, payment of social benefits, payment of bonus fo 1991 and 1994

LABOR POLICIES DURING THE REFORM PROCESS

The labor program followed the timetable shown in Graph 6. The process of strategy definition for the capitalization of the company was carried out in an open consultation process with potential investors in two seminars one in La Paz in August 1994 and the second in Miami in April 1995.

GRAPH 6 TIMETABLE OF ENFE'S LABOR REFORM



During *Phase 1* the government designed the strategy to conduct the labor reform process within the strategy to capitalize the company splitting it in three units: The Eastern Network, the Andean Network and the remaining unit Enfe Bienes y Servicios in charge of the assets and railroad services. During this stage several activities were carried out such as research of workers expectations and main worries, design of message, printing of promotional materials, organization of logistics and planning and start of executions of dismissals by early retirement and voluntary separation. *Phase 2* was a critical period of transition when additional workers were dismissed from capitalized units through involuntary separation and when the remaining unit of ENFE Assets and Services received workers and started the preparation of massive dismissals. *Phase 3* was extended for at least a year conducting various activities aimed to workers that remained in ENFE Assets and Services such as training and infrastructure building programs, sale negotiation of assets to workers and voluntary separation.

a) Determination of Ideal Number of Employees

As part of the terms of reference assigned to the main financial advisor SOCIMER/INECO, the Ministry of Capitalization requested a proposal for the determination of the ideal number of employees. The financial advisor was selected at the beginning of 1995 and submitted his proposal for labor allocation in October 1995 after carrying out a detailed work analyzing data of the company's workers situation. Part of

the consultations with potential investors, included labor topics as structure of labor, number of workers, specialties, level of education and other criteria.

The process of determination of individual workers followed two stages:

1. Definition of total number of workers:
 - Obtain estimations of reasonable number of employees comparing international ratios of workers vis-à-vis track extensions or volume transported, and
 - Exchange numbers with potential investors through meetings held in various occasions including: the presidential seminar in August 1994, the follow up seminar in Miami in April 1995 and one one-on-one meetings during October and November 1995.

2. A defined criteria of allocation of personnel including:
 - Adjustment to a referential structure of allocation of personnel
 - Limited changes from one department to another
 - Limited geographical changes
 - Transfer of workers only younger than 50 at a certain date (December 31st 1995)
 - Only transfer of qualified workers (with documented proof)
 - No transfer of audit section
 - Suppression of certain departments such as legal, audit and personnel and transfer of minimum personnel in each of those areas.
 - Specific departments had special treatments such as procurement where transferred workers could have a maximum period of 1 to 10 years in the firm, or the construction and maintenance of the tracks, where all workers were assigned to the new companies.

Once agreed on the ideal number of workers, they were transferred to ENFE Assets and Services leaving each of the newly created companies with an acceptable number of workers. The Ministry of Capitalization conducted the selection of workers to be transferred to the newly created units following the advice of the consultant firm Socimer/Ineco. The criteria as explained later on in this chapter, involved aspects of experience, training and standard requirements for personnel to operate specific areas. The selection was conducted based on an anonymous database provided by the company and did not involve the bidders.

Preliminary results obtained by the financial advisor SOCIMER/INECO were submitted to all participants in the bid and were part of the discussion carried out during one-on-one meetings at the last stage of the process in October and early November of 1995. A new version of the report including investor's comments was presented in November and was considered the basic reference to conduct the restructuring process of the labor sector. The following table presents the results that guided the second stage of restructuring explained earlier.

TABLE 8
IDEAL SIZE AND STRUCTURE OF WORKFORCE

CATEGORY	REFERENCE SOCIMER/INECO	IDEAL NUMBER		EXCESS WORKERS	
		ANDEAN	EASTERN	ANDEAN	EASTERN
Administrative	12%	104	109	491	207
Track and construction	22%	198	209	458	196
Traffic and Movement	60%	540	570	154	(115)
Mechanics	7%	59	62	486	190
TOTAL	100%	900	950	1,588	478

Source: Socimer/Ineco Report November 1995

Initially workers were transferred to the remaining company so there were no immediate dismissals. Later, the Government carried out all dismissals of personnel assigned to the remained unit.

b) Labor Reduction During Capitalization Program

The reduction of 1,600 workers since 1993 was not enough according to an analysis prepared by SOCIMER/INECO. The financial advisor estimated that an additional number of approximately 2,200 workers should be reduced in order to prepare a viable company that would be attractive to private investors.

The labor-restructuring program followed two steps: i) The first took place during the preparatory process when the company was split into three units: the Andean Network, the Eastern Network and the remaining unit ENFE Assets and Services. During this period, workers were assigned to each of the three units and early and normal retirements programs were promoted. ii) The period took place during the three month period before and after the selection of the winner of the bid and before the transfer of administration, reducing further the number of employees in all three units.

During the first phase, ENFE Assets ad Services was created with 70% of the workers from Andean Network and 30% from Oriental (1,538 and 675 respectively). That represented a reduction of 62% of the total number of workers for the Andean Network and 47% for the Eastern Network. During this stage, 259 workers voluntarily accepted the normal and early retirement offers. See Table 10.

Although initially the capitalization team considered that this was a sufficient margin to reduce the labor force, further exchanges of points of view with potential investors and deeper analysis of the business models for both companies resulted in a supplementary reduction of personnel to be dismissed by 34% in the Andean Network and 11% in the Eastern Network.

TABLE 9
LABOR FORCE REDUCTIONS DURING THE CAPITALIZATION PROCESS

	ANDEAN NETWORK	EASTERN NETWORK	ASSETS & SERVICES	TOTAL
Before Capitalization	2,488	1,428	-	3,916
During Capitalization*	950	753	1,954	3,657
At the moment of Closing	619	669	1,100	2,388
REDUCTIONS DURING CAPITALIZATION	1,538	675	-1,954	259
REDUCTIONS AT CLOSING	331	84	854	1,269
% OF REDUCTION DURING CAPITALIZ.	-62%	-47%		-7%
% OF REDUCTION AT CLOSING	-35%	-11%	-44%	-35%

Source: Ministry of Capitalization Archives

* Including 259 Normal and Early Retirements

The only case where workers took retirement options was a group of 259 workers at the beginning of the capitalization process during the first stage of dismissals. In this group, 161 workers that would have retired in 1996 and 1997 took early retirement losing 8% of the pension payment per year of early retirement. This significant loss of pension payment under the early retirement program was one of the reasons to deter potential beneficiaries.

TABLE 10
RETIREMENTS

	ANDEAN NETWORK	EASTERN NETWORK	TOTAL
Normal Retirements (1994, 1995)	56	42	98
Early Retirements (1996, 1997)	91	70	161
TOTAL	147	112	259

Source: Ministry of Capitalization Archives

Amongst the workers that remained in the company there were 150 people that met the retirement age of 65 years and could have retired in 1996 with full benefit payments and 168 in the following two years. Amongst these workers, all those who opted for retirement before November 1996 retired under the old system. As the rest of worker, those retiring under the new system received their pension from the new Pension Fund Managers following the system explained before in this chapter.

c) Payment of Benefits During the Capitalization Program

According to Bolivian Labor Law, dismissed workers are entitled to receive: i) one month's salary for every year worked, ii) three months of salary to provide for

income while searching for a new job, iv) a pro-rated portion of the current year's year-end bonus ('aguinaldo'), v) payment for any untaken vacation

Article 55 of Supreme Decree 21060 of 1985 granted companies the right to freely rescind work contracts.

During the Bolivian Capitalization process and for all companies under reform, it was decided not to give any extraordinary benefits to workers than those mandatory by law, this represented a severance payment of three monthly wages and for those with more than five years of work and equivalent of one wage per year of work. Workers also received unemployment benefits consisting of medical and maternity benefits for two months following dismissal. There was no any additional incentive for workers that decided to retire voluntarily.

"Prompt payments and in full amount", was the only offer by the company. That was an attractive offer for ENFE workers that traditionally waited months to receive social benefit payments in previous administrations. The offer had a response from 45% of workers in the remaining ENFE Assets and Services that opted for voluntary separation.

Table 11 illustrates the package paid to workers in both networks during the last stage of the process of capitalization when 1,269 workers were dismissed. The total package of \$US 6.4 Million represented an average payment of \$US 5,051 per person or the equivalent to 18.4 months of the average wage in the company.

TABLE 11
PAYMENT OF BENEFITS
\$US

	ANDEAN NETWORK	EASTERN NETWORK	ASSETS & SERVICES	TOTAL RETRENCHMENT
WORKERS SEPARATED	331	84	854	1,269
SOCIAL BENEFITS	1,348,200	336,960	3,582,240	5,267,400
SEVERANCE	288,900	77,760	775,440	1,142,100
TOTAL	1,637,100	414,720	4,357,680	6,409,500
AVERAGE PAYMENT	4,946	4,937	5,103	5,051

Source: Ministry of Capitalization Archives

Until March 1997 only 120 workers remained in ENFE Assets and Services and another group of 120 remained as temporaries. The cost of the program of dismissals for approximately 2,200 workers was projected in US\$ 12.6 million that was financed by the Treasury through a Structural Adjustment Credit (US\$ 10.1) and ENFE Assets and Services that financed approximately US\$ 2.5 million with the collection of remaining payments from former clients and from sales of assets. It is estimated that there are some residual expenses for litigations waiting for a court ruling for US\$ 3.5 million.

As an additional benefit to workers living in certain regions, the government decided to sell houses that were inhabited by workers of ENFE Assets and Services

according to a priority list for those who don't have a house, for the elderly and finally for the general population.

d) Retraining and Redeployment Support

During the labor reform process of ENFE Assets and Services, there were two main programs aimed to support workers redeployment. A general program carried out under the leadership of the Ministry of Labor known as Poverty Alleviation Program and a specific program executed by the Ministry of Capitalization targeted to Uyuni, the most conflictive location in the railroad reform and a very important town in the southern part of the country within an area of extreme poverty.

Poverty Alleviation Program

The program executed by a specific agency within the Ministry of Labor was created in 1990 with the purpose to support retrenchment programs during the public enterprise reform. Formed under the previous scope of privatization, the program designed a plan to assist an estimated a number of 10,000 displaced workers mostly from ENFE and YPFB, the hydrocarbons company.

The program included two components: a monetary monthly subsidy distributed for one year and a technical support to retrain workers on specific topics and on management courses aimed to create Productive Units. Workers could decide if, instead of receiving a monthly subsidy they could have a slump sum payment to use as a capital contribution to create a Productive Unit.

The retraining program was conducted with the support of a local institute (INFOCAL) and other institutes of technical education. In 1995, the Ministry of Labor reported to have created 170 Productive Units with 60% of them having been consolidated.

Other retraining programs were addressed to the list of workers registered in the labor exchange managed by the Ministry of Labor in many cities around the country. A public and private training institution with the financial support of the Ministry of Labor and NGO's offered courses.

An additional program handled by the National Secretary of Industries with the cooperation of the Technical Assistance Service (SAT) and the World Bank provided retraining services. The Ministry of Labor participated in this program through the Unit called PROMOCENTROS, an office of the Ministry for the Promotion of employment. These courses were provided by the SAT and other participant institutions.

In addition to the above-mentioned programs, there is an exclusive program for former employees of capitalized companies. The program conducted by UDATEL (Unidad de Asesoramiento Técnico Laboral), a government unit for technical advice for

workers, was executed in 1995 and counted with financial support from the Andean Development Corporation (CAF) to support the transition of workers to new employments. The program supported retraining programs for some workers of ENFE and started to develop additional plans to ease the transition of workers in already capitalized companies.

Uyuni Special Program

Uyuni a town of 10,000 inhabitants hosted the biggest repair shop for locomotives and wagons of ENFE providing direct employment to more than 380 families and indirectly to more than 50% of the population.

After the capitalization it was expected that the repair shop would close due to its inadequate location and outdated technology. The Government under the leadership of the Ministry of Capitalization designed and executed 27 projects of basic infrastructure and education to reconvert the town to tourism industry.

The town at the border of the largest salt plain in the continent is surrounded by deserts and extinct volcanoes in contrast with multicolored lagoons with rare flamingos, hot springs, fumaroles, geysers, boiling mud pools, steaming streams, wind-eroded rocks, wild llamas and vicuñas.

Education Programs

The program consisted of training sessions to create companies and micro enterprises particularly in the maintenance of the railroads.

The three month intensive course was given by INFOCAL in various activities such as: driving courses, metal mechanics, welding, industrial machinery, electro mechanics, car mechanics, plumbing, electricity. The courses would be delivered to former ENFE employees in Uyuni and in other cities such as La Paz, Cochabamba and Oruro. The Ministry of Capitalization contributed with the payment of instructor's expenses, per diems and tickets.

Also the Ministry promoted courses for computing, hotel industry, woodworking, cooking, hair cutting and apparel.

Infrastructure Programs

The Ministry coordinated the work of government development agencies to build basic infrastructure in the town such as the connection to a main water source that was only used by the repair shop. The Ministry also coordinated the financing of infrastructure work for houses that were sold to workers that voluntarily left the company as a retirement incentive.

e) Employee Share Ownership:

The participation of employees in the share ownership program was one of the main goals of the Ministry. The objective in transforming a traditional worker into a shareholder was to promote a common interest between government and workers to work for a good transaction. The relatively successful participation of workers in the purchase of shares demonstrates how important was the program and how valuable was the message to participate actively and positively.

Option Contract

In Bolivia there is no tradition of employee share ownership. The only experience in the cement industry in the city of Cochabamba ended up in bankruptcy with workers losing their investments. In addition to this lack of culture in share ownership, the government was not in a position to finance a gift of shares to employees therefore the Ministry had to look for an alternative way to overcome the cultural, economic and risk aversion problems.

To address all problems at the same time the Ministry decided to draw on the Option Contract as a mean to minimize the risk and facilitate the promotion of share ownership amongst workers.

In order to access the option, workers had to purchase one share at a pre-established book value share price of US\$ 20. The option contract gave workers the right to buy shares owned by the state or public shareholders at book value, up to a total of their social benefits (one monthly wage per year of work). The option could be exerted anytime during a period of one or two years after the closing of the transaction with the private operator (varied amongst companies and it was a result of negotiations).

Employee Participation

Workers participation in the acquisition of share options can be seen in Table 12. Participation varied across sectors being the company's financial situation, probably the most important reason for workers to decide on the purchase of share options. For companies in the electricity and telecommunications sectors, this was particularly important where workers clearly perceived investor's interest and a successful bid. In the case of the transport sector, both the railroad and the airline, the difficult economic situation and limited investors shown by investors may have played an important factor to discourage workers to purchase the share option.

Other factors that influenced worker's decision were the degree of education of personnel relatively higher in electricity and hydrocarbons and particularly low in railroads. The degree of influence or pressure exerted by unions played a key roles specially in the case of the railroads and airline. A general factor that played a key role in companies with

successful participation is the attitude of company's executives towards the reform process.

TABLE 12
EMPLOYEES THAT BOUGHT THE SHARE OPTION

Company	Employee Shareholders*	Percentage
ENFE	2,195	56.1%
Andean	899	36.1%
Eastern	1,296	90.8%
ENDE (Electricity)	457	90.0%
ENTEL (Telecom)	1,515	92.4%
LAB (Airline)	947	59.7%
EMV (Mining)	936	99.7%
YPFB (Hydrocarbons)	4,044	86.5%

Source: Ministry of Capitalization Archives
* Workers that bought the share option prior bid award.

Districts in the Andean Network under strong influence from unions like Uyuni, Cochabamba, Viacha and Potosí had a low participation in the purchase of share option with 9.8%, 14.1%, 16.3%, 21.1% respectively.

After the opening of the economic envelopes, the offer for the newly issued shares in the case of the Eastern Network was only 4.6% above book value and for the Andean Network was 54.3% below the book value. Most of the workers decided not to exert their options to buy additional shares except very few ones mainly in the Eastern railroad as shown in the following table.

TABLE 13
SHARES OWNED BY WORKERS

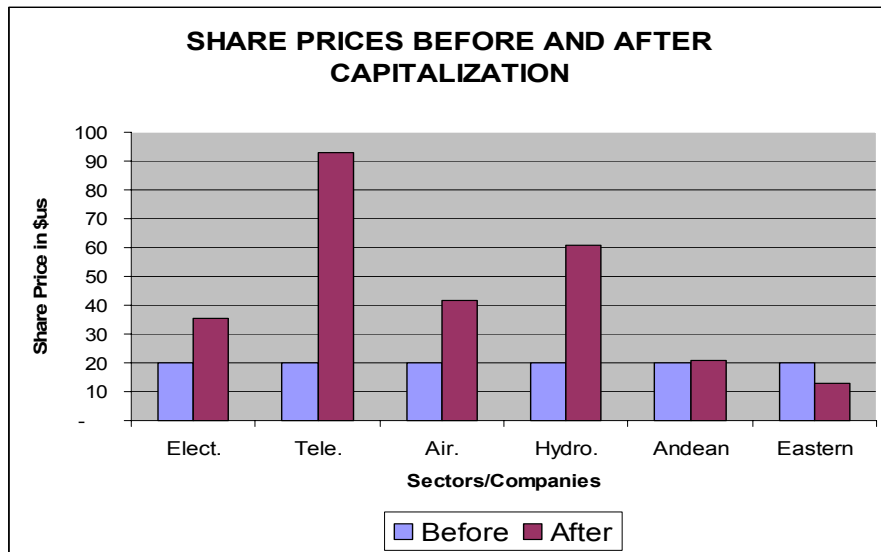
	ANDEAN NETWORK	EASTERN NETWORK
TOTAL SHARES IN COMPANY	1,322,448	4,593,964
TOTAL SHARES OWNED BY WORKERS	942	4,097
TOTAL PARTICIPATION	0.071%	0.089%

Source: Annual reports for both companies

The total amount of shares available for workers if all decided to buy up to their limit of accumulated social benefits would have been US\$ 4.9 Million for the Andean and US\$ 2.5 million for the Eastern or 18.5% of the total package of shares for the Andean Network and 4.8% for the Eastern Network of the revalued price, although in the case of the Andean workers would have had to pay approximately the double of what the investor paid because the clause of fixed price in the Option Contract.

In other sectors particularly in the electricity, telecoms and hydrocarbons, workers purchased massively additional shares after knowing the bidding results with higher prices paid by winning bidders. As can be seen in the following table, in some sectors, offers for shares increased its value significantly reaching in the case of the telecom a level almost five times its original value and in the case of hydrocarbons reaching three times higher. In some cases like in companies in the hydrocarbons sector, workers contacted banks and brokerage firms to procure financing and buy up to the limited established for each worker.

GRAPH 4



Source: Ministry of Capitalization Archives

Importance and Impact of Employee Participation

Massive participation by employees in the capitalization process of state owned companies was considered a core objective within the capitalization program. From the legal standpoint, the participation was an indispensable requisite for transforming state owned companies into mixed capital companies, although legally it was sufficient for just one employee to buy a share.

Moreover, the model used for employee participation added a social component to the capitalization process. Acceptance by employees of the government's offer to participate in mixed companies as shareholders and workers was the mainstay of the process and was able to neutralize strong public opposition and permit the program to proceed.

f) Implementation Constraints and Issues

The labor program in the railroad sector was one of the most difficult ones in the capitalization process, because of, for example a divided and combative union organization, a low educated pool of workers, groups of employees scattered along the route, easy way to block the service, bad financial and organizational company's situation.

Therefore, the Ministry of Capitalization put an extraordinary effort to address workers' problems and create a minimum acceptable social climate to attract investors. The Ministry started an aggressive program to contact workers directly through small number groups and simultaneously continued negotiations with Unions and Federations. The two main issues for these encounters were: the terms of labor continuity programs for workers to be transferred to capitalized companies and the share ownership program for all workers. The following section describes the work carried out during these encounters.

Direct Communication Events

After evaluating different alternatives, the Ministry together with their strategic communication consultants decided to organize seminars to promote the labor policy consisting of a two fold message: i) labor continuity and ii) share ownership.

The following guidelines were used in designing the seminars:

1. Presentations to groups of not more than 200 employees;
2. Total length of presentations and questions and answers for four hours;
3. Venue outside the company, preferably in a good hotel;
4. Comfortable premises with enough seating for all employees;
5. Provision of notepads and informative materials upon registration;
6. Presentations lasting no more than 20 minutes with question and answer periods lasting no more than an hour;
7. Twenty-minute break with a snack and a meal at the end (lunch or dinner)

All seminars were carefully organized since any delays or technical failures could cause employees to react negatively. Support personnel selected from the companies and trained by Ministry Staff were used to attend stands, with three people for every 40 employees. Their role was to provide personalized information and answer specific questions and also to sell shares. Apart from permitting closer quality control and follow-up, in some cases this arrangement even led to competition between stands to see who could sell more shares.

After presentations it was necessary to create a relaxed atmosphere in which employees could question speakers. In some cases, particularly where there was greater resistance to buying shares, incentives such as draws for television sets and radios were provided to encourage employees to participate.

As part of support activities, the communications unit from the Ministry of Capitalization executed a wide campaign including publications of announcements in local newspapers with information about the capitalization process. Radio and TV spots answering key questions of workers on labor stability or share ownership were targeted to regional and local radio and TV stations.

The production of texts and designs included information and analysis gathered by focus groups and interviews to workers and executives. All along the campaign, the team in charge of executing the privatization strategy evaluated the impact of the campaign through focus groups and interviews.

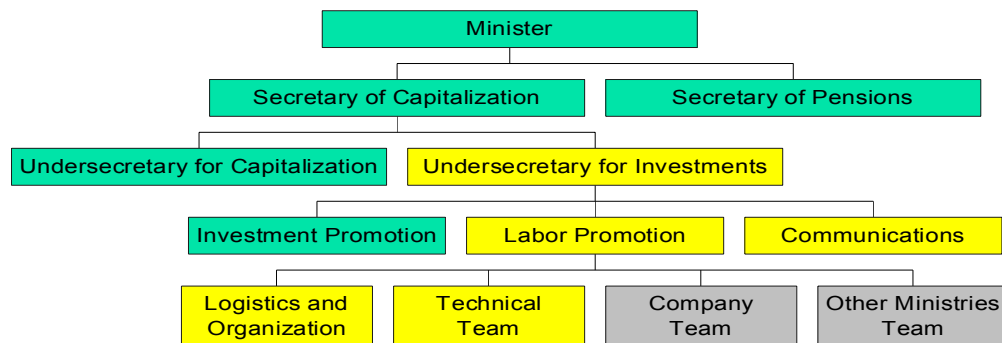
Institutional Framework

The Ministry of Capitalization through the Undersecretary for Investments directed the labor reform process in the railroad sector.

The Undersecretariat had two main areas of work dedicated to labor issues: Labor Promotion and Communications. These two units coordinated work with technical teams in each of the companies working under the Undersecretary of Capitalization or directly reporting to the Secretary of Capitalization.

Part of the personnel was in charge of setting up and organizing all activities related to logistics around the country supporting activities of general communications and specific tasks related to workers information programs and promotion of share options. Technical teams were formed by professionals in the area of communications and other disciplines like team building and training.

The Ministry personnel worked together with other teams formed with workers from the company under reform. Normally the team from the company was formed by mid level executives supported by technical staff motivated to do the work. In some companies this personnel had sympathy with or belonged to a political party in government. In special cases normally for the most complex transactions or with highly sensitive worker environment, ministries like labor, energy or communications, also integrated the team and participated in all communication or share option promotion activities.



- Ministry of Capitalization, Other than Labor Specific
- Ministry of Capitalization, Labor Specific
- Other than Ministry of Capitalization, Labor Specific

At the highest level of activity, more than 70 people from the Ministry (including national and international advisors), the company and other agencies of the government worked on:

- Conducting presentations in seminars
- Distributing printed materials,
- Designing radio and TV spots,
- Training workers' leaders
- Selling shares and explaining option contracts
- Selecting the personnel to be transferred and calculating social benefits

The technical approach that was used to promote the participation of workers and to transmit the message of job continuity incorporated a lot of credibility and had a great impact on most workers. The use of plain but technical speech was homogenous in all communications during presentations, printed materials and in ads in radio, TV and newspapers. The Ministry dedicated time and resources to train company teams in most cases formed by workers' leaders. Activities included seminars and preparation of manuals prior starting promotional activities within the firm and before contacting directly workers at the base.

RESULTS OF LABOR REFORM PROGRAM

a) Impact on Employment

After capitalization, private operators continued reducing further the work force in each of the companies as can be seen in Table 14. In the case of the Andean company, the reduction was larger than the Eastern Network; the latest number of workers in 2001 represents 53% of the original number of workers assigned to the company in 1996 compared to 66% in the Eastern Network.

TABLE 14
REDUCTION OF PERSONNEL

	ANDEAN		EASTERN	
1995	619		669	
1996	573	-7%	722	8%
1997	439	-23%	603	-16%
1998	368	-16%	550	-9%
1999	325	-12%	489	-11%
2000	324	0%	460	-6%
2001	330	2%	439	-5%
AVERAGE		-10%		-9%
ACCUMULATED (1)	289	-67%	230	-45%
% FROM ORIGINAL ASSIGNED	53%		66%	

Source: Annual reports from both companies

(1) Deducted from original number of workers assigned to each company

The reduction of personnel in both companies was carried out simultaneously through internal restructuring programs. During the second year of operation a higher proportion of services were outsourced and new and better-qualified personnel was hired especially in executive and managerial levels. Services as cleaning, security, mechanics and track maintenance have been gradually substituted by external existing companies or companies that were created after the capitalization of the railroad sector, mainly by foreign investors.

Certain services as infrastructure maintenance are completely outsourced with a local company that organizes the group of workers along the route. The second biggest groups in services are security and cleaning followed by mechanical services. See Table 15.

TABLE 15
OUTSOURCING IN EASTERN NETWORK

	1996	1997	1998	1999	2000	2001	2002*
Infrastructure		273	366	320	327	321	317
Operations			19	30	40	40	18
Mechanics				50	65	75	50
Security		13	68	105	120	84	84
Cleaning		13	34	68	70	68	68
Catering	14	14	14	14	14	7	7
Other services	20	20	20	20	25	20	15
Total	34	333	521	607	661	615	559

Source: Company information

*Data for 2002 is based on the first quarter

Likewise the Andean Network increased its outsourcing starting the first year with 246 workers mainly in the operations sector as well as in the infrastructure. The mechanical service is kept under the company and differently from the Eastern Network the Andean that originally had the best qualified mechanics in the old ENFE now sells its mechanical services to other sectors including the Eastern Network.

TABLE 16
OUTSOURCING IN ANDEAN NETWORK

	1996	1997	1998	1999	2000	2001	2002*
Infrastructure	70	80	90	90	95	100	100
Operations	100	100	100	106	106	110	106
Mechanics							
Security	25	31	31	29	32	30	30
Cleaning	27	27	29	29	30	35	30
Catering	24	24	20	17	17	15	15
Other services							
Total	246	262	270	271	280	290	281

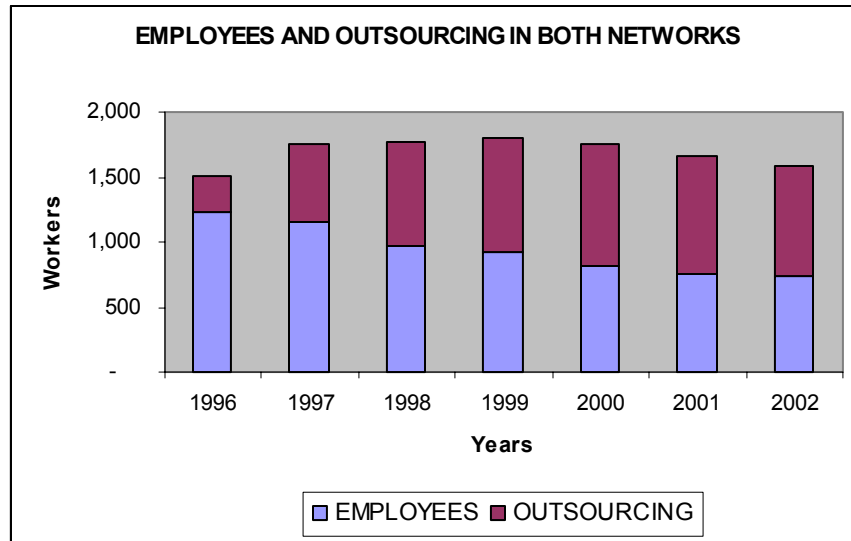
Source: Company information

*Data for 2002 is based on the first quarter

The Graph 5 clearly shows an increase of employment after the introduction of private participation in ENFE. The available cash in the company and the commitment to invest it in a limited period of time have directly impacted on the demand of outsourcing services. The amount of work demanded has almost reached levels of employment as the ones before the last reduction of personnel prior the closing of the transaction.

In 1998, the highest level of total employment in both companies including outsourcing is 47% larger than the total employment at the moment of closing of the transaction. The share of outsourcing to total employment increases almost constantly from 19% in 1996 to 53% in 2002.

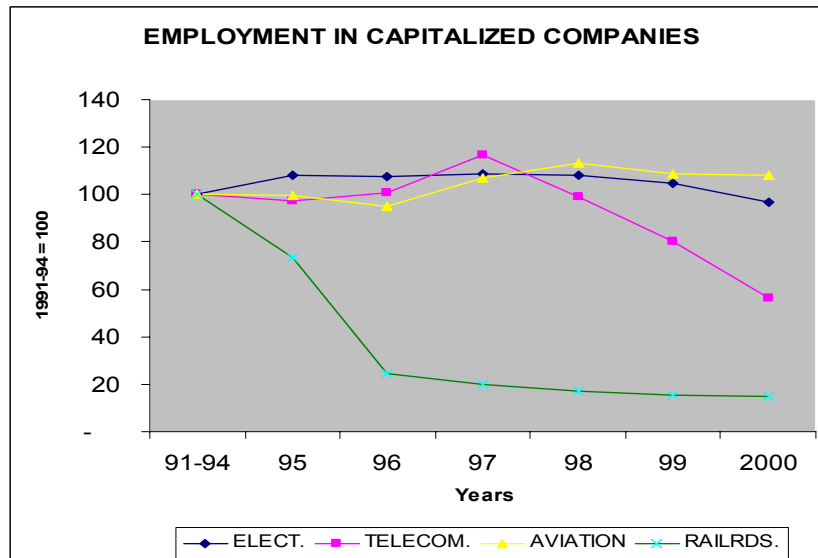
GRAPH 5



Source: Annual memories and specific information provided by both companies

The labor situation in other sectors was quite different as there were no major dismissals and investors kept all workers as shown in the following table. The outsourcing has also been a practice for other sectors mainly in the telecommunications and electricity sectors but this only took place during the third and fourth years after in some cases a increase of direct employment from levels prior capitalization. A similar exercise including outsourced personnel as the one showed with the railroad sector would likely show a similar trend of expansion of employment in other capitalized sectors.

GRAPH 6



Source: Salinas Luis Fernando, et al, *La Capitalización, Cinco años Después*, Fundación Milenio, 2002

b) Impact on Wages

Compensation to workers show that average wages have performed well in local currency increasing in 32% from the first year of operation. In dollar terms the increase was 15% or 3 percent per year a better indicator or increase in real wages. In dollar terms the sudden increase of 24% from the first year has not been sustained for the following years gradually reducing compensations in a cumulative proportion of 11%. See Table 17.

TABLE 17
AVERAGE COMPENSATION FOR WORKERS
EASTERN RAILROAD

Nominal	Bs.	Exchange Rate	US\$	US\$/Month
1996	6,594	5.07	1,301	108
1997	8,705	5.25	1,658	138
1998	8,951	5.5	1,627	136
1999	9,062	5.8	1,562	130
2000	9,378	6.17	1,520	127
2001	9,776	6.55	1,493	124
Percent Variation				
1997	32%	4%	27%	27%
1998	3%	5%	-2%	-2%
1999	1%	5%	-4%	-4%
2000	3%	6%	-3%	-3%
2001	4%	6%	-2%	-2%
Difference from 1st year	3,182			16
In Percentage	48%			15%

Source: Data provided by the company and Central Bank

c) Impact on Shares

Although prices of shares were not attractive enough to buy additional shares under the option plan, workers that bought in the Eastern Network benefited from the distribution of profits especially in the Eastern Network with profit returns of 30% as an average for the first three years and 15% as an average for following three years. See Table 18.

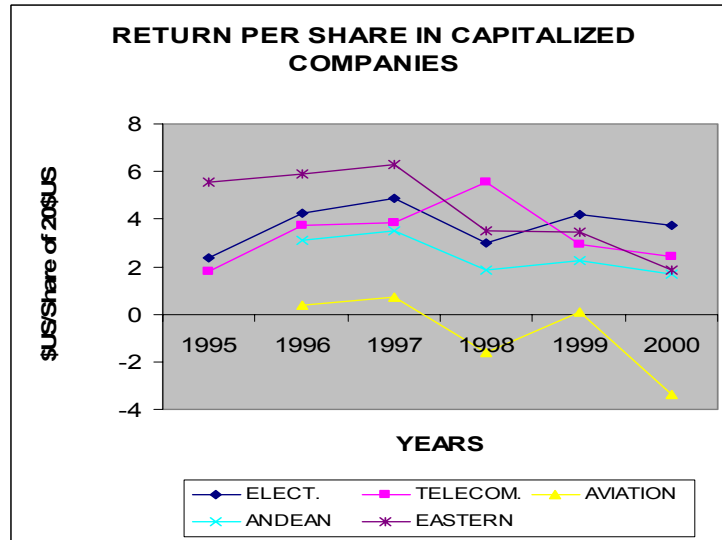
TABLE 18
PROFIT PER SHARE

	NOMINAL		PERCENTAGE	
	ANDEAN NETWORK	EASTERN NETWORK	ANDEAN NETWORK	EASTERN NETWORK
	US\$	US\$	%	%
1996	3.13	5.58	15.6%	27.9%
1997	3.50	5.89	17.5%	29.5%
1998	1.86	6.31	9.3%	31.6%
1999	2.26	3.48	11.3%	17.4%
2000	1.71	3.43	8.6%	17.2%
2001		1.83		9.2%

Source: Annual reports for both companies

For the rest of sectors as shown in the following table, profits or the return for each share varied being the Easter Network one of the best performers followed by far by the electricity sector and the telecommunications sector. The worst performer was the airline that incurred losses during the second year of operation after capitalization and ended up selling its assets to a consortium led by a local investor in 2001.

GRAPH 7

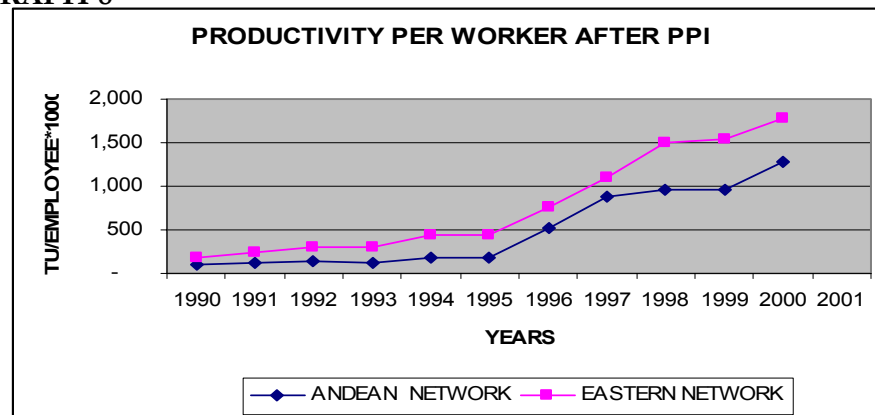


Source: Salinas Luis Fernando, *et al*, La Capitalización, Cinco años Después, Fundación Milenio, 2002

d) Productivity Outcomes

As the following graphs shows, the impact of labor restructuring on productivity measured as TU⁴ per employee or labor compensation per revenue improved significantly in both networks.

GRAPH 8

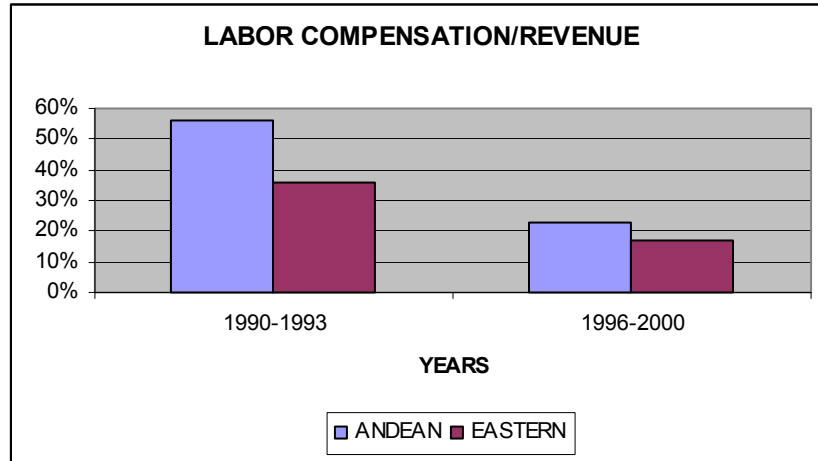


Source: Annual memories and specific information provided by both companies

⁴ TU - Traffic Unit = net freight tone-km + passenger km

During the first year of capitalization in 1996, the Andean Network improved its productivity per worker almost 200% compared to 76% for the Eastern Network. Although the average growth for the period 1996 – 2000 is higher for the Andean than for the Eastern (62% vs 35%), the Eastern has increased every year in a sustained way, keeping a higher level than the Andean (38% higher) but reducing from what it was originally in 1994-1995 (1.5 times higher).

GRAPH 9



Source: Annual memories and specific information provided by both companies

In terms of percentage of labor costs compared to revenue, the behavior for both systems has been more similar showing a decrease of percentages between the periods 1990-1993 and 1996-2000 of almost two thirds in both cases.

* * *

PART D: LESSONS LEARNED

SEARCH OF A STRATEGY THAT MINIMIZES LAY-OFFS

Private sector participation strategies should strive to minimize lay-offs. The Capitalization model has proven to be a good alternative to traditional privatization in terms of creation of employment. Under Capitalization, payments in exchange of ownership are deposited into the newly reformed company's account for future investment, rather than to the Treasury, as is the case under traditional privatization. This approach enables the new administration to retain a larger work force and even increase employment.

PROMOTE SHARE OWNERSHIP – BRING WORKERS ON BOARD

Share ownership is the best way to advance private participation processes. As shareholders, workers attitudes change significantly because they realize that creating major opposition and/or inflating the book value can have detrimental consequences on the transaction and their potential gains. It is critical to offer option mechanisms for share ownership that are attractive both in terms of price and risk. In Bolivia workers understood their preferential treatment and the link between the success in the transaction and their monetary gains. This was reflected in unusually high levels of workers participation and by and large expeditious privatization processes.

PRIORITIZE INDIVIDUAL CONTACTS BUT OPEN TO COLLECTIVE NEGOTIATION

While union negotiation is necessary, it is advisable to establish and maintain contact with workers beyond the union level. Employees need an individualized message. Government officials need to create opportunities for workers to participate in forums that convey more targeted messages, and that provide employees the venue to express their concerns without reservation and in front of process specialists and government authorities. In addition, the direct contact is very useful for gathering information about workers' perceptions and attitudes towards the reform process and thus provides a useful feedback to improve the promotion effort.

IN-DEPTH PREPARATION PRIOR TO APPROACHING THE WORKERS – BETTER LATE THAN NOT THOROUGHLY PREPARED

The initial approach and the first message is critical in forging a relationship between workers and government officials. It is imperative to research workers' opinions and attitudes towards the reform process. It is also very important to work on the details of the meetings – speakers, presentations, audio visuals, meals, transportation, supporting

material, questions and answers manuals, and general logistics – to avoid problems that may hinder the message. During the Bolivian Capitalization process, numerous information seminars covering transaction details, labor policy and workers share ownership, proved to be effective.

ORGANIZE A WELL QUALIFIED TEAM

Government's labor communication policy involves diverse tasks that require specialists in different areas. At the beginning the research on workers perceptions, and identification of key issues, need professional assistance to conduct polls, questionnaires, focus groups, and other research techniques. During public information activities, the design and content need the participation of communications specialists. While presenting the strategy, workers need to have access to technical experts, company executives, and government officials.

BE REALISTIC WITH COSTS

Execution of a labor reform process needs sufficient economic resources. Commitment to expensive programs, such as payments of bonus and extraordinary benefits, need to be backed by prompt financial resources, otherwise social and political reaction can obstruct the process. Likewise, communication programs, extensive travel, and promotion programs need to have enough resources to finance the entire program, a sudden suspension or significant reduction may affect the positive attitude gained by the labor force and create a vacuum filled by those critical to the process. Certain activities represent significant expenses such as the logistics, communications, meals, incentives and printed material or audiovisual documentation.

ACCESS TO HIGHEST LEVEL OF DECISION

During the execution of the labor policy programs, certain issues may arise that need immediate resolution. It is key to have access to high-level decision makers to coordinate any agreement or negotiation with promptness. In the case of Bolivia, many workers were opposed to the government because there were some commitments of the present or previous administration that were not honored. In those cases a high level coordination between government agencies can ease the tension and gain the support of many workers, something that can be very crucial in certain processes.

SIMPLIFY AND UNIFY THE PLAN

When there is the possibility to conduct various privatizations programs like in Bolivia's case, it is advisable to implement a single labor policy for all companies and negotiate only company specific issues; otherwise the negotiation can be never ending. A single and simple strategy proposal is the best way to handle a promotion campaigns across

companies. In addition, communications between workers, production of printed material, follow-up, and interpretation of results, are better handled as a group.

ALWAYS MAINTAIN CONTACT

From initial contact to closing of the transaction, government executives and workers must maintain a permanent contact to keep the flow of information and avoid any disruption or misinterpretation. The availability of consultation boots in the company with workers that were previously informed about the process and/or government representatives is highly desirable to give workers the opportunity to address questions and resolve doubts.

EXECUTION LEVEL – NOT NECESSARILY THE HIGHEST LEVEL

While contacting workers and presenting the transaction or explaining the opportunities, it is very important to avoid transforming the communication into a negotiation table with the risk of going to radically opposed positions at early stages of the process. Reversal of those types of situations can take a lot of resources in time and effort and can derail the reform process. One way to avoid this situation is to conduct the preliminary meetings through mid-level government executives that can be intermediaries but not direct negotiators.

UNDERSTAND LABOR IMPACT IN THE LONG TERM

The introduction of private sector participation on railroad companies will generally have a strong impact on labor reduction as was discussed in this paper. Nevertheless it is important to differentiate the long term effect specially when considering other factors as wages, productivity and increase of entrepreneurial stimulus. For various sectors it seems that this has played an important role increasing outsourcing and encouraging enterprise development in the sector.

* * *

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ANNEX 2: PEOPLE CONTACTED DURING THE VISIT TO BOLIVIA

1. Mckay, Gerson, Budget Secretary, Ministry of Finance, Government of Bolivia, La Paz.
2. Valencia, Jaime, General Manager, Empresa Ferroviaria Oriental.
3. Besse, Claude, General Superintendent, SIRESE, La Paz.
4. La Fuente, Jose, Empresa Eléctrica Corani, General Manager, Cochabamba.
5. Pariente, Rolando, Manager, Transportadora de Electricidad, Cochabamba.
6. Vega, Jhon, Human Resources manager, Transportadora de Electricidad, Santa Cruz.
7. Brinati, Rossana, Librarian, CEDLA, La Paz.
8. Rico, Ramiro, General Manager, ENDE, Cochabamba.
9. Rodríguez, Hugo, Lawyer, ENFE, La Paz.