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The World Bank

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Report No: 28049-TU

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF EURO 143.7 MILLION
(US$ 184.7 MILLION EQUIVALENT)

TO THE

REPUBLIC OF TURKEY

FOR A

RAILWAYS RESTRUCTURING PROJECT
IN SUPPORT OF THE FIRST PHASE OF
THE RAILWAYS RESTRUCTURING PROGRAM

May 12, 2005

Infrastructure and Energy Department
Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2005)

Currency Unit	=	Yeni Turkish Lira (YTL)
1 YTL	=	US$1.369
US$1	=	0.73 YTL

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

APL	Adaptable Program Loan
B/CR	Benefit Cost Ratio
CAS	Country Assistance Strategy
CFAA	Country Financial Accountability Assessment
CTC	Central Traffic Control
EIRR	Economic Internal Rate of Return
EMP	Environmental Management Plan
EMU	Electric Motorized Unit
ERP	Enterprise Resource Planning Project
EU	European Union
FDI	Foreign Direct Investment
FMR	Financial Monitoring Report
FMS	Financial Management System
FRS	Financial Reporting Standards
FY	Fiscal Year
GNP	Gross National Product
IAS	International Accounting Standards
ICT	Inland Container Terminal
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
ILO	International Labor Organization
IMM	Izmir Metropolitan Municipality
IMO	International Maritime Organization
ISA	International Standards on Auditing
JBIC	Japan Bank for International Cooperation
KPI	Key Performance Indicators
LSDP	Letter of Sector Development Policy
MIS	Management Information System
MoF	Ministry of Finance
MoT	Ministry of Transport
NPV	Net Present Value
OED	Operation Evaluation Department

OPMIS	Operational Management Information System
PFMC	Public Financial Management Control Law
PHRD	Policy and Human Resources Development Fund
PIU	Project Implementation Unit
PSO	Public Service Obligation
PSSP	Privatization Social Support Project
SAI	Supreme Audit Institution
SBA	Stand By Agreement
SBD	Standard Bidding Documents
SEE	State Economic Enterprise
SPO	State Planning Organization
TCA	Turkish Court of Accounts
TCDD	General Directorate of State Railways Administration - "Türkiye Cumhuriyeti Devlet Demiryollari"
UT	Undersecretariat of Treasury
VSL	Variable Spread Loan
YDK	High Audit Board

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TURKEY
RAILWAYS RESTRUCTURING

CONTENTS

TURKEY

Railway Restructuring Program

Project Appraisal Document

Europe and central Asia
ECSIE

Date: May 12, 2005	**Team Leader**: Michel Audigé
Country Director: Andrew N. Vorkink	**Sectors**: Railways (100%)
Sector Manger/Director: Motoo Konishi	**Themes**: Infrastructure services for private sector development (P);Other public sector governance (S)
Project ID: P077328	**Environmental screening category**: B
Lending Instrument: Adaptable Program Loan	**Safeguard screening category**: N.A.

Program Financing Data							
APL	**Indicative Financing Plan**				**Estimated Implementation Period (Bank FY)**		**Borrower**
	IBRD US$ m	**%**	**Others US$ m**	**Total US$ m**	**Commitment Date**	**Closing Date**	
APL 1 Loan/ Credit	184.7	84	36.3	221.0	09/15/2005	12/31/2009	Republic of Turkey
APL 2 Loan/ Credit	115.3	50	114.7	230.0	01/01/2007	12/31/2011	Republic of Turkey
APL 3 Loan/ Credit							
Total	300.0	66	151.0	451			

Project Financing Data

[X] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Bank financing (US$m.): 184.7 (€143.7 equivalent)
Proposed terms: Variable Spread Loan (VSL) on IBRD standard terms – 17 years maturity, including 4 years grace period

Financing Plan (US$m)			
Source	**Local**	**Foreign**	**Total**
BORROWER	36.3	0.0	36.3
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	106.6	78.1	184.7
Total:	**142.9**	**78.1**	**221.0**

Borrower:
Undersecretary of Treasury
General Directorate of Foreign Economics relations
Ismet Inonu Bulvari No: 36 Balgat
Ankara - Turkey
Tel: (90) 312 88 55 - Fax: (90) 312 212 85 50
Email: ozgur.pelhivan@hazine.gov.tr

Responsible Agency:
Türkiye Cumhuriyeti Devlet Demiryollari" (TCDD)
Genel Müdürlüğü
06330 Gar – Ankara - Turkey
Tel: (90) 505 256 15 34
Email: ismetduman@tcdd.gov.tr

Estimated disbursements (Bank FY/US$m)

FY	FY05	FY06	FY07	FY08	FY09				
Annual	0.0	49.6	72.7	45.1	17.3	0.00	0.00	0.00	0.00
Cumulative	0.0	49.6	122.3	167.4	184.7	0.00	0.00	0.00	0.00

Project implementation period: Start September 1st, 2005 End: March 31, 2009
Expected effectiveness date: September 1st, 2005
Expected closing date: September 30, 2009

Does the project depart from the CAS in content or other significant respects? ***Ref. PAD A.3***	[ ]Yes [X] No
Does the project require any exceptions from Bank policies? ***Ref. PAD D.7***	[ ]Yes [X] No
Have these been approved by Bank management?	[ ]Yes [ ] No
Is approval for any policy exception sought from the Board?	[ ]**Yes** [X] No
Does the project include any critical risks rated "substantial" or "high"? ***Ref. PAD C.5***	**[X]Yes** [ ] No
Does the project meet the Regional criteria for readiness for implementation? ***Ref. PAD D.7***	**[X]Yes** [ ] No

Project development objective ***Ref. PAD B.2, Technical Annex 3***
The overall objective of the project is to improve the financial viability, productivity, and effectiveness of railways operations.

Project description *[one-sentence summary of each component]* ***Ref. PAD B.3.a, Technical Annex 4***
The APL1 (with a total cost of US$221.0 million of which US$184.7 million are Bank financed) would include: (i) advisory services to implement the restructuring of the TCDD under current Railway law and to prepare APL2; (ii) initial staff adjustment program; (iii) line capacity increase along Mersin-Toprakkale and Yenice-Boğazköprü corridors; (iv) training for TCDD staff; (v) support for improved internal and public communication; and (vi) support for project implementation costs.

Which safeguard policies are triggered, if any? ***Ref. PAD D.6, Technical Annex 10*** Environmental Assessment (OB/BP/GP 4.01)
Significant, non-standard conditions, **if any**, for: ***Ref. PAD C.7*** **Board presentation**: None. **Loan/credit effectiveness**: (i) finalization of the project operational manual by TCDD; (ii) signing of the Project Implementation Protocol between the Undersecretariat of Treasury, as the representative of the Borrower, and TCDD; and (iii) legal opinions related to the Project Implementation Protocol are submitted by the Undersecretariat of Treasury and TCDD. Covenants applicable to project implementation: ***Project Covenants:*** the following covenants aim to ensure that the APL1 meets its key objectives: (i) the track access charge system - as defined by the new Laws - is established not later than December 31, 2007; (ii) based on the results of the rationalization of passenger services study financed under the project, the line Ministries and the TCDD sign multi-annual Public Service Contracts with railways operators for passenger loss-making services retained by the Turkish Authorities for social purposes by December 31, 2007; (iii) based on the finding of the study related to the review of railways investment/maintenance program for railways infrastructure and freight operations financed under the project, TCDD revises its investment/maintenance program in the railways sector; and (iv) a mid-term review off the APL1 will take place in May 2007. ***Financial Covenants:*** the project implementing agency will maintain a financial management system acceptable to the Bank. Both project and entity financial statements, Statement of Expenses and Special Account will be audited by independent auditors acceptable to the Bank and on terms of reference acceptable to the Bank[1]. The annual audited statements and audit report will be provided to the Bank within six months of the end of each fiscal year. In order to build up the financial management capacity of the TCDD, the following covenants are proposed: (i) In order improve the financial management controls at TCDD, the company will engage consultants for carrying out a detailed review of internal controls which will identify gaps and weaknesses in internal control framework. The Bank, through supervision missions, will monitor implementation of the action plan to strengthen the internal controls in TCDD. (ii) a modern ERP[2] is installed and operational by end of December 2007; and (iii) TCDD will maintain a financial management system acceptable to the Bank.

[1] The project financial statements will be audited by independent auditors acceptable to the Bank and on terms of reference acceptable to the Bank. TCDD financial statements will be audited by independent auditors acceptable to the Bank in accordance with IFRS and ISA. For the first two years of the project audit reports of TCDD prepared by YDK will be relied upon for purposes of satisfying external audit requirements of the project. The annual audited statements and audit report of TCDD and the Project will be provided to the Bank within six months of the end of each fiscal year.

[2] ERP stands for Enterprise Resource Planning

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and Sector Issues

Only four years ago the Turkish economy suffered a serious crisis, leading to the devaluation of the currency by some 50 percent, a jump in nominal interest rates to 100 percent, the virtual collapse of the banking system and the bankruptcy of scores of enterprises. At the end of 2001, Turkey registered a 10 percent decline in GNP, inflation was on the order of 70 percent, and the net public debt to GNP ratio reached 94 percent.

Turkey's economy has rebounded from this crisis, and economic growth has been strong since 2001 (namely 8 percent in 2002, 6 percent in 2003 and close to 10 percent in 2004). At the same time, inflation has been brought under control reaching single digits (9.3 percent) in 2004, the lowest in Turkey for thirty years. Net public debt to GNP decreased significantly to 63.5 percent at end-2004. This impressive macroeconomic performance has been achieved through a combination of stabilization measures, with strong fiscal discipline at its core allowing the maintenance of large primary surpluses of the public sector on the order of 6.5 percent of GNP, an ongoing structural reform agenda that was initiated by the previous Government, and followed by the current one, and political stability since the November 2002 elections. As a result, Turkey's economy has become significantly more resilient to external shocks over the past two years. Nonetheless, risks do exist that should not be underestimated, such as if there were to be a sharp change in the global economic scene, a potential rise in interest rates, which may affect the Government's ability to roll over public debt, or possible reform fatigue in Turkey.

The decision of last December's European Union (EU) summit on the opening of accession negotiations in October 2005 has been an important signal for the financial markets and has created a firm anchor for Turkey's development in the years ahead. As observed elsewhere, the process of accession provides a strong incentive to continue with political, macroeconomic and structural reforms. Turkey's own pre-accession program sets out ambitious objectives including 5 percent growth and the reaching of the Maastricht gross debt criteria of 60 percent of GNP in 3 years. The potential for significant FDI could also be unlocked by the prospect of EU membership, although this will take time to build up.

The **Turkey Country Assistance Strategy** (discussed by the Board of Directors of the World Bank on November 6, 2003) recognizes that raising the efficiency of Turkey's transport sector will contribute to economic growth, environmental sustainability and poverty alleviation. Key priorities for the medium term include *inter-alia*: (i) continuing the restructuring and privatization of public utilities coupled with sector reform; and (ii) implementing the reform process inherent in the EU "*acquis communautaires*".

Turkey's geopolitical position - as a link between Europe and Asia - makes the transport sector crucial for the economic development of the region. Turkey is a major player both as a transit country and as an origin and destination of freight. The recent positive political developments with regard to the EU accession process and the growing role of Turkey in trade between Central

Asia and the South Caucasus with an enlarged European market make the focus on transport even more important.

TCDD, the Turkish State Railways Administration operates the national railway, the seven largest ports, and manufactures and repairs locomotives, wagons, passenger coaches, as well as sleepers and switches. Created as a result of the nationalization of the railways in 1924, TCDD was set up as a State Economic Enterprise (SEE) in 1953. As a State owned enterprise, TCDD has the monopoly of any railways related activities. Yet, it is currently the largest money loser among Turkey's public sector enterprises: in 2004, TCDD lost US$548 million[1].

The railway related activity is the largest element of TCDD, i.e., about 85 percent of TCDD total operating costs but slightly less than 50 percent of its operating revenues in 2004. During the period 1993-2004, the railway cost the Government about US$9 billion, averaging about US$750 million a year. In 2004, total support from public finance to cover losses as well as capital investment amounted to US$1,023 million, or 0.4 percent of GDP. The value of budget support together with uncovered losses expressed as a share of GDP is broadly comparable with other railways in middle-income countries in Europe[2]. Although the highly profitable port related activities are cross-subsidizing TCDD revenues, its operating revenue does not cover the cost of its staff.[3] The staff totals about 39,000 of which about 10,000 are employed at ports and non-core affiliated companies. The railway traffic market share has been steadily decreasing since the 1950's to become marginal, reaching in 2004, only 2 percent of passenger-km and 4 percent of freight ton-km. The decline in traffic share is the result of: (i) a lack of investment in infrastructure; and (ii) the rapid growth of road transport in the past decades, while the railway's traffic grew at a slower pace of about 2 percent per year.

Safety and accident prevention is a top priority of successful railways that needs to be thoroughly strengthened within the TCDD from management to workers. Safety policies exist in principle, but are not properly enforced in practice.

The Turkish Government has decided to restructure its transport system and particularly the role of the railway and its economic value. Despite the shrinking share of the rail market, it would not be either politically acceptable or economically sound to consider the closing of the railways as some social and economic needs cannot be fulfilled by other transport modes, e.g., dry and liquid bulk, containerized traffic and urban transport services in already highly congested cities. The railway reform strategy of the Government is detailed in its Letter of Sector Development Strategy signed by the Minister of Transport in December 2004 (see Annex 1).

Letter of Sector development Policy (LSDP): The Government has taken a clear commitment to change the TCDD's structure and technology to cope better with the competition in the global market and to increase the share of rail in the transport sector. More specifically, the LSDP includes unequivocal commitment for an in-depth reform of the TCDD with the preparation of two new Laws: (i) a Railway Law providing a new legal framework for railway activity

[1] US$643 million if profit from ports is excluded. Railway loss in 2003 was US$640 million equivalent.
[2] Croatian Railways (1.3% of GDP), Romanian Railways (0.7%), Bulgarian Railways (0.6%), Poland (0.4%).
[3] As imposed by the current Railways Law, Treasury has to financially cover TCDD staff cost on a monthly basis, which clearly does not create any incentive for TCDD to reduce its excess of staff.

consistent with EU directives; and (ii) a TCDD Law supporting the reorganization of the national railway company. Through a technical assistance grant provided by the EU to the Turkish Government, the preparation of the two laws started in early 2005 and a first draft is expected for June 2005. The above reform will have to be completed by the end of 2006. The restructuring includes essentially the separation and eventually the privatization of the affiliated companies and of the ports operations, the reshaping of the labor force and the reduction in redundant staff. The social plan is to be implemented gradually in order to minimize the negative impact resulting from the staff adjustment process. Several of these actions have been initiated and are detailed in the Letter of Sector Development Policy (see Annex 1).

TCDD Business Plan 2005-2010. To support the decision taken by the Turkish authorities to reform the TCDD, a detailed TCDD Business Plan for the period 2005-2010 has been prepared with the assistance of specialized consultants and has been approved by the Board of Directors of the TCDD on March 23, 2005. The main objectives of the Business Plan aim to: (i) improve its financial situation; (ii) establish a more client oriented structure; (iii) increase railway competitiveness and market share; (iv) integrate the national network into the European and Asian network; and (v) provide an equitable, secure and economic service for the users. The satisfactory implementation of the Business Plan is an integral part of the proposed project. A summary of the Business Plan is included in the Annex 1.

2. Rationale for Bank Involvement

The Government has requested the assistance of the Bank in both roles as an independent advisor and as a financier. With its experiences all around the world in restructuring railway national companies, the Bank is certainly in a unique position to provide appropriate advice and to work in close cooperation with the EU to help TCDD to reduce its financial losses and in meeting the EU accession requirements. Financing would be required to support consultancy services, staff retrenchment, and some financially sound rehabilitation of infrastructure and operating assets. As a result of the policy dialogue between the Government, TCDD and the Bank, which has taken place since 2001, in particular through ESW (TCDD – Options for reform – June 2002), there is now a reciprocal trust in the success of the project.

3. Higher Level Objectives to which the Project Contributes

It is expected that the project will reduce the logistical costs associated with the current inefficiencies and high costs of both the railway and port sub-sectors, allowing importers and exporters to develop existing trade related businesses. The project will also contribute to improve the level of safety and security for train passengers contributing to a modal shift between road and rail transportation. The railway institutional reform initiated under the project with the support of the European Commission will contribute to Turkey's accession process to the European Union. The benefits expected from the railway restructuring will result in gradually decreasing the financial support from the national budget, allowing a redeployment of the scarce public resource in other sectors.

B. PROJECT DESCRIPTION

1. Lending Instrument

The lending instrument proposed for this project is a two-phased Adaptable Program Loan (APL) to be implemented respectively over 2005-2009 and 2007-2011. The loan type for the first phase is the Bank's single currency variable spread loan (VSL) with a 17 year maturity, including a 4 year grace period.

According to the Public Finance and Debt Management Law, Treasury cannot guarantee an agency which is making financial losses. By Law No 5319 - amending various Laws, approved on April 2005, Treasury has been authorized to grant foreign loan proceeds to TCCD, including those proposed under this project.

Taking into consideration the nature of the project which: (i) supports an in-depth institutional reform of the railway sector in compliance with the EU *Acquis Communautaires*; (ii) results in a complete reorganization of the TCDD to make it more market and client oriented; (iii) supports restructuring which significantly improves the financial performance of TCDD; and (iv) includes a relatively modest investment modernization component with regards of the existing TCDD assets, such financial arrangement is found relevant and acceptable.

The financial forecast of the railways included in the PAD has been performed considering the World Bank loan proceeds as a grant to TCDD. Based on the output of the TCDD financial model used for the preparation of the project, the impact of on-lending the US$184.7 million APL1 loan proceeds on commercial terms, i.e., 3 year grace period and 5.6% interest per year, would result in delaying the expected progressive re-establishment of the financial situation of the TCDD by about one year.

2. Program Objective and Phases

The overall objective of the program is to improve the financial viability, productivity, and effectiveness of railways operations. The overall strategy of the Turkish Government as stated in the LSDP spells out the Railways Restructuring project objectives. Because some of the reforms can be implemented only after the enactment of the future Railway and TCDD Laws, a two stage approach for the reform is suitable. The Bank's investment lending support for the proposed Government's railway restructuring program would be through a two-phased Adaptable Program Loan (APL).

The choice of an APL would allow greater flexibility in program execution to gradually achieve the reform, which partially depends of the enactment of laws to be submitted to the Parliament later in 2005. The first phase - the proposed APL1 project - will be executed over a period of four years (2005-2009). The first phase of the APL will launch the restructuring of TCDD by carrying out an internal reorganization and staff rationalization achievable under the current legal framework. Technical assistance will develop the institutional reform, and prepare the studies necessary for the implementation of APL2. The enactment of the future Railway and TCDD Laws (which is the main trigger for APL2), will create the legal framework compulsory for the whole implementation of the reform, in particular of the second part of the staff retrenchment, not currently achievable under the current legal framework. The second phase (APL2) will build on the institutional developments achieved under APL1 and on the first steps of TCDD restructuring, and will consolidate and provide sustainability for the restructuring project. Performance during the first phase will be the key determinant in triggering the second loan.

Although likely improbable, a major delay in the enactment of the future Railway and TCDD Laws due - for example - to an unexpected political situation, would not compromise the outcomes expected from the APL1 project. The decision to reorganize the TCDD into "lines of businesses" will lead to improved operational performances, and the staff adjustment foreseen under APL1 will improve the TCDD working ratio whilst the line capacity increase will contribute in generating additional revenues. The main consequence of a major delay in the enactment of the new laws would be to lengthen the staff adjustment process and to postpone some key elements of the reform such as the introduction of competition in the railway sector, and the establishment of public services contractual arrangements for transport of passengers on loss-making lines.

The proposed APL is structured according to the following characteristics:

Program duration: The whole APL program described above would be implemented between 2005 and 2011. The APL will include two phases that will each be implemented over a period of 4 years or less. Structured as a vertical APL supporting a long-term investment program of about US$450 million (of which US$300 million is expected to be Bank financed), the first phase will begin in September 2005 and the second phase possibly in September 2007, which would overlap with Phase 1, as the institutional requirements have been met by the Government and the new interventions are ready to be implemented.

Phases description: The APL1 (with a total cost of US$221.0 million of which US$184.7 million are Bank financed) would include: (i) advisory services to implement the restructuring of the TCDD under current Railway law and to prepare APL2; (ii) initial staff adjustment program; (iii) line capacity increase along Mersin-Toprakkale and Yenice-Boğazköprü corridors; (iv) training for TCDD staff; and (v) support for improved internal and public communication.

The APL2 (with a total cost of about US$230 million of which at least US$115 million is expected to be Bank financed) that will be finalized during the implementation of the APL1 would include: (i) advisory services to complete the restructuring of the TCDD and assist in the implementation of the new institutional and regulatory setup resulting from the new laws; (ii) support for continuing the staff adjustment program; (iii) line capacity increase along Irmak-Zonguldak corridor; and (iv) other components as deemed necessary to ensure the success of the of the overall program.

APL1:Detailed Project Costs

Project Base Cost By Component and/or Activity (US$ million)	Local	Foreign	Total	IBRD Loan
A - Modernization of infrastructure	45.4	64.8	110.2	114.5
B - TCDD staff adjustment & social mitigation	74.2	0.0	74.2	65.2
C - Advisory services to the TCDD	0.3	2.8	3.1	3.4
D - TCDD staff training and re-training program	0.1	0.4	0.5	0.6
E – Public communication and surveys	0.2	0.0	0.2	0.2
F – Project Implementation costs	0.1	0.6	0.7	0.7
Unallocated:				
Total Baseline Cost	**120.3**	**68.6**	**188.9**	
Physical Contingencies	8.3	6.7	15.0	
Price Contingencies	14.3	2.8	17.1	
Total Project Costs	**142.9**	**78.1**	**221.0**	**184.7**
Interest during construction				
Total Financing Required	**142.9**	**78.1**	**221.0**	**184.7**

APL 2: Notional Project Costs

Project Total Cost By Component and/or Activity (*US$ million*)	Total	World Bank Loan
A – Modernization of infrastructure (Irmak-Zonguldak)	127.0	
B – TCDD staff adjustment & social mitigation under new Laws	100.0	
C - Advisory services to the TCDD	1.8	
D – TCDD staff training and re-training program	0.5	
E – Public communication and surveys	0.2	
F – Project Implementation costs	0.5	
Total APL2 Notional cost estimate	**230.0**	**115.3**

Triggers for the preparation of the APL2: Triggers for the second phase of the APL are summarized below. A summary report for the first phase would have to be submitted six months prior to the launching of the second phase and will serve as a basis determining readiness for APL2.

- Both the new Railway and TCDD Laws are approved by the Parliament and enacted, since the APL2 essentially aims to support the implementation of the Laws, especially with regards to the finalization of the restructuring of the TCDD.

- Satisfactory progress, assessed along the following criteria, has been made during the implementation of APL1:
    a. Decision is taken by the TCDD Board of Directors to replace current "regional based" organization by a "line of business" organization in compliance with the content of Letter of Sector Development Policy and the TCDD 2005-2010 Business Plan, not later than six months after the enactment of the above mentioned new Laws.;
    b. Through management decisions resulting from the implementation of the TCDD 2005-2010 Business Plan, railway staff (excluding port and affiliated companies) is reduced significantly in a socially acceptable way;
    c. The design of TCDD Operations Management Information System (OPMIS) is compliant with the best international standards is completed by December 31, 2006;
    d. The following studies: (i) the rationalization of passenger services in view of the preparation of draft multi-annual Public Service Contracts; and (ii) the review of railways investment/maintenance program for railways infrastructure and freight operations are completed by December 31, 2006; and
    e. Ports under TCDD are fully separated from TCDD by December 31, 2006.

In line with the aforementioned discussion, the set of triggers chosen to move to the second phase will ensure: (i) the achievement of substantial progress in the implementation of the APL1 and (ii) the establishment of an enabling legal environment to continue the reform.

3. Project Development Objective and Key Indicators

The objective of the Project is to support the Borrower's implementation of the Program over the four (4) year period 2005-2009, to improve productivity and effectiveness of railway operations and to assist TCDD in reaching a financially sustainable situation and reduce the fiscal burden TCDD represents for the Borrower. The project principal outcome is to align the Turkish railways competitiveness with European railways, and thus reducing its current financial deficit from 0.4 percent to about 0.2 percent of GDP in 2009. This will be achieved through an in-depth reorganization of the TCDD, with a clear separation of infrastructure from operations, increasing accountability and competitiveness in rail operations, restructuring and rationalization of passenger services, labor rationalization, as well as corporatization and privatization of some non-core activities.

More specifically, the APL1 aims at: (a) assisting in setting up a new legal framework allowing TCDD to operate on a commercial basis and receive public service obligations (PSO) payments for services rendered to the government for social and/or political reasons; (b) increasing the transparency and accountability of TCDD operations through the separation of the infrastructure and operating (freight, passenger) entities; (c) shifting from current regional based organization toward a "lines of business" organization[4]; (d) adjusting TCDD work force through an acceptable gradual reduction of staff; (e) modernizing some of TCDD's core infrastructure and operating

[4] i.e., freight, passengers, infrastructure and tractive & rolling stock (see Annex I for details).

assets to improve safety level; and, (f) divesting from some non-core services. In the short term, establishing a new structure with accrued accounting, operating, bidding procedures, transparency, and efficient governance, will permit pinpointing the flaws of the company, so as to be able to solve them more efficiently in a subsequent phase of the reform.

Key Performance Indicators (KPI). In addition to the proposed triggers detailed in the precedent paragraph, APL1's overall performance would be assessed through a number of qualitative and quantitative indicators. The specified indicators would be regularly monitored and evaluated by Treasury and TCDD. The agreed key performance indicators to be used to assess the progress made under APL1 are detailed in Annex 3.

The key performance indicators include:

KPI_1: Institutional reform: A new legal and regulatory framework of the sector - compliant with the EU "*Acquis communautaires*" - is in place by end of 2006.

KPI_2: Competitiveness of rail operations: (i) TCDD operating annual revenues increases by at least 10 percent per year during the period 2005-2009; and (ii) Freight traffic increases from 9.6 billion ton-km in 2004 to 11.6 billion ton-km by 2009.

KPI_3: Productivity and effectiveness of rail operations: TCDD operating losses are significantly reduced, and the working ratio[5] without subsidy would improve from 366 percent in 2004 to 200 percent or less by 2009;

KPI_4: Staff adjustment: TCDD railway staff is reduced significantly in a socially acceptable way;

KPI_5: Reduction of fiscal burden: TCDD's dependence on public finance to cover rail deficit and investment decreases from 0.4 percent of GDP in 2004 to less than 0.2 percent of GDP in 2009.

4. APL1 Components

The APL1 total cost is estimated at US$221.0 million, of which, the World Bank finances US$184.7 million (€143.7 million equivalent[6]). It includes the following components: (i) rehabilitation/modernization of infrastructure and operating assets to increase the capacity of the most active links within the Turkish railway core network; (ii) gradual but significant TCDD staff adjustment and social mitigation plan designed under a socially acceptable program; (iii) transaction assistance and other advisory services to the TCDD to carry out well targeted key activities detailed below; (iv) staff training and re-training; and, (v) TCDD public communication improvement.

[5] working ratio without subsidy: defined as operating costs before depreciation, divided by operating revenue, excluding subsidy.

[6] 1€ equivalent to US$1.2853 at the time of negotiations on May 5, 2005

Component A: Railway infrastructure modernization: This component includes investment aimed at increasing freight transport capacity and safety of train movements on the double-track Mersin-Toprakkale and on the single-track Yenice-Bogäzköprü lines (lengthening of crossing loops, color-light signaling and Central Traffic Control, mechanical ventilation of tunnels, optic fiber telecommunication, and improvement of railway connection to Mersin port customers). (see Annex 4 for details).

Component B: Staff adjustment and social plan: This component will support the implementation of the restructuring process of the TCDD with a reduced number of employees. In order to avoid social unrest, the project will provide adequate financial resources to allow TCDD to implement its social mitigation program which consists in a broad number of incentives and services geared to the varying circumstances of employees. The social mitigation program has been designed to mitigate the adverse effects on TCDD employees of technological, operational and organizational changes. The various incentives and services proposed by TCDD for downsizing are quite common and have been applied successfully in many other employment restructuring projects, and quite recently in Turkey as part of the Privatization Social Support Project financed by the World Bank. The proposed social mitigation program for TCDD is organized into three components: (i) severance payment and compensation incentives; (ii) retraining and redeployment; and (iii) support services (See Annex 4 for details).

Component C: Advisory services to TCDD: This component will provide for technical assistance and consultancy services to TCDD as needed to complete the new institutional framework and implement restructuring of TCDD assets and operational practices (See Annex 4 for details).

Component D: TCDD Staff training and re-training: This component would support the implementation of part of the TCDD 2005-2008 training program in the following fields: (i) railway procedures review and design; (ii) operational performance monitoring; (iii) improved communication and negotiation skills within the TCDD; (iv) labor regulation on safety and health; and, (v) other areas

Component E: TCDD Public communication and periodic surveys: This component would provide technical assistance for developing an efficient communication strategy within and outside the TCDD aiming to improve the poor image Turkish railways suffers from among the public. Periodic customer surveys would be conducted in order to track positive changes and to improve commercial strategy.

***Component F*: Project Implementation Costs**: PCU Incremental Operating Costs include PCU staff salaries (excluding government employees) and staff per diems and lodging as well as travel costs for field trips related to the implementation of the project, supplies, utilities, sanitary cleaning, communication and security cost including internet, transport costs for training of IPCU staff, seminars and workshops, office equipment, hardware and software, furniture and M&O including fuel, service and car insurance for vehicles and procurement/leasing/renting of vehicles.

5. Lessons Learned and Reflected in the Project Design

The client and the Bank have drawn valuable lessons from preparing and implementing past railway projects in Eastern Europe and elsewhere, and in particular projects aimed at helping the restructuring and privatization of railways and these have been taken into account in the preparation of this project. The two railway projects financed by the World Bank in the past decades (see Annex 2) aimed at transforming the TCDD into a commercially viable enterprise by modernizing its infrastructure and providing technical assistance. Although the two projects have been successful in meeting some of their sub-objectives, i.e., civil works and acquisition of equipment, three major lessons resulted from the assessment carried out by the World Bank Operation Evaluation Department (OED).

First, more effort should have been made by the World Bank in persuading the Turkish Government to address the root causes of TCDD's poor efficiency, which were identified at that time as it's regional based organization, inadequate institutional status, and staffing. Second, in order to reduce its unit operational costs - instead of relying primarily on tariff adjustments - the TCDD was found inefficient in capturing more freight traffic, especially dry and liquid bulk. Third, the traffic projections used during the preparation of the projects proved excessively optimistic.

Another lesson learned from similar railway restructuring projects is that particular attention should be paid to the staff retrenchment program and the related social mitigation. The most crucial lesson learned is that any staff retrenchment program needs to be well defined in terms of an overall strategy: the type of compensation options, the retrenchment policy (voluntary or involuntary), and whether retrenchment is to be phased or sequenced. Further, the overall strategy should be agreed between the government, the railway and the trade unions.

The overall concept of the proposed project is based on a clear commitment from the Government to proceed with the reform of the railway sector, i.e., signed Letter of Sector development Policy, and on a TCDD Board approved action plan, i.e., 2005-2010 Business Plan. The infrastructure component of the proposed project has been primarily designed to increase line capacity for freight along one of its major trade corridors. Regarding traffic forecast, the project team has chosen more conservative figures for traffic projections, than those initially proposed by TCDD, with, however, a reasonable increase in freight volume resulting from: (i) sustained economic growth of Turkey foreseen for the next coming years; (ii) development of new activities, e.g., petroleum products and containers; (iii) improved connection between the ports and the railway network; and, (iv) sustained demand of transit traffic to and from Iraq. Finally, irreversible actions have been taken during project preparation to inform the TCDD staff on the necessary staff adjustment program to be implemented under the project.

6. Alternatives Considered and Reasons for Rejection

As currently done in other countries in the region, e.g., Croatia, the reform of the railway sector could have been implemented through an adjustment-type operation. However, an APL was found by both the World Bank and the Turkish Government as the most appropriate instrument for the following reasons: (i) the crucial importance attached to the enactment of a new institutional setup that requires Parliament approval; (ii) the strong commitment to reform expressed by the Government; and, (iii) the importance of the infrastructure modernization component included in the project to generate additional revenues.

C. IMPLEMENTATION

1. Partnership Arrangements

The technical assistance provided by Bank staff, consultants, and under past railway and road projects in helping to shape the Government program and institutional reforms, has been fully supported by the European Commission delegation in Ankara. The Turkish government and the World Bank have maintained regular contact with representatives of the European Union, as well as with JBIC and the IFC, to keep them informed and to consult them on the content of the project during its preparation phase.

2. Institutional and Implementation Arrangements

Implementing Entity. TCDD will have the overall responsibility for project coordination through the Project Implementation Unit (PIU), which has been already established within the TCDD's Research, Planning and Coordination Department. TCDD has implemented several foreign donor financed projects and in the past few years, PIU staff has developed capacity in preparation of bidding documents and cash flow forecasts. The PIU will be responsible for the day-to-day management of the project including procurement, financial management, and liaison with the Bank team. The PIU will be headed by a Project Manager with appropriate qualifications and experience and assisted by current TCDD experienced senior staff. The current information systems of TCDD are inadequate and integration of the accounting and reporting systems is required for sound financial management at TCDD. There is no network connection between regions and the headquarters and there is not a central data base for financial data storage. Therefore financial reports are produced manually. To address these deficiencies TCDD is considering the implementation of an ERP; an integrated system which will include a management information system, related hardware, software and procedural standards. TCDD systems will be relied upon to generate the project financial statements when the ERP becomes functional. Until then temporary arrangements will be relied upon for project accounting and reporting. The progress with building up the financial management capacity will be monitored closely by the Bank and necessary technical support in the area will be provided.

Funds Flow. As is common for Bank-financed projects, there will be one special account for the project at the Central Bank of Turkey to be operated by TCDD. All payments to the contractors, suppliers and consultants will be made from this special account with the endorsement of the PIU Project Manager and the Project Financial Manager.

3. Monitoring and Evaluation of Outcomes/Results

Project monitoring during the course of project implementation and after the project has been completed would be carried out by the PIU staff, with the assistance and guidance provided by

TCDD relevant experts, under close supervision from MoT and Treasury. This would entail updating the business plan on a regular basis, auditing of financial statements, and monitoring project performance indicators for the duration of the project (per agreed indicators – Annex 3). Project progress reports would be prepared by the PIU on a semi-annual basis and submitted to the Bank's review. The progress reports will focus on results rather than providing process related information.

4. Sustainability

The Government is committed to reform the railways, moving from the past situation of "wanting to do something" to the definition of a clear policy as detailed in the signed Letter of Sector Development Policy (LSDP). The decision taken by the Government to initiate the preparation of a new legal and regulatory framework for the railways with the technical assistance funded by the EU, together with the progress achieved so far in the policy dialogue during project preparation, contribute to the sustainability of the proposed project.

5. Critical Risks and Possible Controversial Aspects

Risk	Rating	Risk Minimization Measure
Insufficient political will to reform.	M	The commitment of the Government to reform the TCDD was confirmed during preparation. Several important steps have already been taken, e.g., signature of the LSDP by the Minister of Transport in December 2004.
Institutional weakness.	S	The technical assistance provided by the EU accession process significantly minimizes this particular risk.
Social resistance to changes.	H	Risk mitigation measures would include close cooperation between the Government, TCDD management and the trade unions, early definition of an appropriate social plan, expeditious payment of the severance benefits and assistance to staff.
Insufficient funding for maintenance of the infrastructure or for Public Service Obligation.	S	Adequate provisions are being discussed between MoT and SPO to be included in the Railway Law under preparation.
Important delay in the shift from current "Regional" to "Lines of business" organization	H	The commitment of the management of TCDD was confirmed during preparation, e.g., formal approval of the 2005-2010 Business Plan by the Board of the TCDD in March 2005.
Overall Risk Rating	**H**	

Risk Rating – H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

The pace of railway restructuring could be subjected to various political factors and considerations. Especially, trade unions may turn against TCDD reform and this could put pressure on the government's ability to make the required decisions. However, the possible negative social impact of the project, related to labor reduction in the TCDD, has been taken into account in the design of the project, as explained in D.4 below. In addition, the proposed TCDD's public communication improvement will help in mitigating this risk.

6. Loan/Credit Conditions and Covenants

Conditions for Board Presentation: None.

Conditions for Effectiveness: (i) finalization of the project operational manual by TCDD; (ii) signing of the Project Implementation Protocol between the Undersecretariat of Treasury, as the representative of the Borrower, and TCDD; and (iii) legal opinions related to the Project Implementation Protocol are submitted by the Undersecretariat of Treasury and TCDD.

Project Covenants: the following covenants aim to ensure that the APL1 meets its key objectives: (i) the track access charge system - as defined by the new Laws - is established not later than December 31, 2007; (ii) based on the results of the rationalization of passenger services study financed under the project, the line Ministries and the TCDD sign multi-annual Public Service Contracts with railways operators for passenger loss-making services retained by the Turkish Authorities for social purposes by December 31, 2007; (iii) based on the finding of the study related to the review of railways investment/maintenance program for railways infrastructure and freight operations financed under the project, TCDD revises its investment/maintenance program in the railways sector; and (iv) a mid-term review off the APL1 will take place in May 2007.

Financial Covenants: the project implementing agency will maintain a financial management system acceptable to the Bank. Both project and entity financial statements, Statement of Expenses and Special Account will be audited by independent auditors acceptable to the Bank and on terms of reference acceptable to the Bank[7]. The annual audited statements and audit report will be provided to the Bank within six months of the end of each fiscal year. In order to build up the financial management capacity of the TCDD, the following covenants are proposed: (i) In order improve the financial management controls at TCDD, the company will engage consultants for carrying out a detailed review of internal controls which will identify gaps and weaknesses in internal control framework. The Bank, through supervision missions, will monitor implementation of the action plan to strengthen the internal controls in TCDD. (ii) a modern ERP[8] is installed and operational by end of December 2007; and (iii) TCDD will maintain a financial management system acceptable to the Bank.

[7] The project financial statements will be audited by independent auditors acceptable to the Bank and on terms of reference acceptable to the Bank. TCDD financial statements will be audited by independent auditors acceptable to the Bank in accordance with IFRS and ISA. For the first two years of the project audit reports of TCDD prepared by YDK will be relied upon for purposes of satisfying external audit requirements of the project. The annual audited statements and audit report of TCDD and the Project will be provided to the Bank within six months of the end of each fiscal year.

[8] ERP stands for Enterprise Resource Planning

D. APPRAISAL SUMMARY

1. Economic and Financial Analyses

Economic Analysis: The physical investments financed under the project (Component A, which represents about 60 percent of the total cost of the project in APL1) are mainly aimed at increasing freight transport capacity on single-track railway lines between the Mersin-Adana-Toprakkale-Iskenderun zone and the Kayseri-Ankara zones. The economic analysis of component A was estimated by the use of a stylized model that considered the actual and forecast freight traffic on the three line sections, and the impact of the proposed investments on available line capacity in a defined 'do-nothing' scenario and a defined 'do-something' scenario.

The economic benefits were defined as the additional revenue that will be realized from additional traffic that can be carried on these line sections, following the increase in capacity, in the defined 'do-something' scenario *vis-à-vis* the defined 'do-nothing' scenario of no capacity enhancements, where a capacity constraint was estimated to restrict future growth in traffic and revenue in 2004, 2007 and 2011, respectively, on the three line sections. The capacity of the line sections in both of the scenarios has been calculated by considering the required travel time through the longest single line section, together with a line and station safety margin.

The results of the economic analysis indicate that component A of the APL1 is economically viable, returning a positive NPV of YTL 44.6 Million, following an investment of YTL 206.66 million. The Economic Internal Rate of Return is 15%, and the estimated benefit-cost ratio is 1.29, which since it is greater than one, would support a decision to invest in the project. (see Annex 9 for more detail).

Financial Analysis: The financial benefits of the project will be derived from: (i) the additional revenue that will be realized from additional freight traffic that can be carried as a result of investments for capacity improvements and (ii) the reduction in labor cost as a result of a significant staff reduction during the period 2005-2010.

The financial analysis indicates that the project is financially viable, returning a very high net present value (NPV) of US$405 million at a discount rate of 12 percent, following an investment of US$129 million for capacity improvements on the above three line sections, US$93 million for compensation incentives offered to TCDD staff for voluntary departures, as well as US$238 million for structural cost of retirement benefits, which is an accrued liability. Total labor cost savings during 2005-2009 alone amount to US$671 million, more than twice the total cost of retrenchment and more than 7 times the cost of the compensation incentives. The financial internal rate of return is estimated to about 50 percent.

It is expected that the investments planned for the railways under the project will lead to substantial improvements in the overall financial position of TCDD. The railway deficit[9] is expected to decrease by about 30% in 6 years from US$548 million in 2004 to US$380 million in 2010. Railway revenues are expected to grow annually by about 10% during this same six year

[9] Excluding depreciation.

period as a result of the combination of: (i) an estimated traffic growth of 6% per annum driven by modernization and rehabilitation of infrastructure financed under the project, the ongoing Ankara-Istanbul rehabilitation project financed by the Spanish bilateral fund, and a new commuter rail system in Izmir; and, (ii) a more commercially oriented tariff policy especially for new activities such as transport of petroleum products and containerized cargo, in addition to the expected sharp increase in commuter passengers services.

To reach and sustain a positive financial situation, TCDD will require substantial levels of budgetary support for investment and delivering passenger services requested by the Government during the period 2005-2010 (details in Annex 9).

2. Technical

The main focus of the project is to improve competitiveness of railway transport, particularly for freight. The key element to improving competitiveness is to restructure assets and operating practices of TCDD with the objective of improving quality of service rendered to the customers and cutting costs. The project will achieve its objectives notably through technical assistance and advisory services and through investment aiming at modernizing infrastructure (lengthening of crossing loops, installation of color-light signaling with Central Traffic Control, fiber optic telecommunication, etc.) on a key route for freight transport.

There are no technical issues with the proposed investment. Design standards for all the investments are well established. Part of equipment to be installed (signaling and telecommunication equipment) pertains to high-level technology. However, there are numerous quality suppliers of such equipment on the international market. No trial or experimentation is involved and there are no important risks concerning technology, design or installation, and future maintenance of the equipment and systems involved

3. Fiduciary

Financial Management

An assessment of the financial management arrangements for the project is undertaken in December 2004 and updated in March 2005. TCDD institutional financial management arrangements are in need of improvement and temporary arrangements are undertaken to address the project financial management issues.

TCDD has decided to implement an Enterprise Resource Planning Project (ERP) which will network the regions and the headquarters and facilitate sharing of data and timely preparation of consolidated financial reports and statements. To ensure that TCDD has a reliable financial management environment, installation of ERP is necessary. TCDD is committed to have the ERP functional in December 2007 and this will be a dated loan covenant.

The auditing arrangements for the entity will also be geared towards improving the financial management systems of TCDD as well as establishing a sound control environment. TCDD will engage consultants for carrying out a detailed review of internal controls which will identify gaps and weaknesses in internal control framework. The bank, through supervision missions, will monitor implementation of the action plan to strengthen the internal controls in TCDD.

Temporary arrangements will be relied upon for detailed project accounting and reporting. The data base currently used for all foreign loans will be used for this purpose.

There will be a special account for the project at the Central Bank of Turkey to be operated by TCDD. All payments to the contractors, suppliers and consultants will be made from this special account with the endorsement of the Project Director and the vice president responsible for project financial management. Government institutions, including state economic enterprises, such as TCDD submit their planned investments for the coming year to the State Planning Organization (SPO) and Ministry of Finance (MoF) in June. Through discussions between the institution, SPO, and MoF, budget allocations for all institutions are finalized in December. Thus, it will be TCDD's responsibility to ensure that sufficient provision is made in the annual budget for the project. Counterpart funds for the project will be paid directly by the accounting department of TCDD and will be integrated into project accounting.

Procurement

Procurement activities will be carried out by the PIU to be established in the General Directorate of Railways (TCDD). An assessment of the capacity of the TCDD to implement procurement actions for the project was carried out in June, 2004. The assessment reviewed the organizational structure for implementing the project.

The key issues and risks concerning procurement for implementation of the project have been identified and include lack of experience with the Bank-financed projects. It was agreed that the procurement specialists and selected technical staff to be assigned by the TCDD for this project are sent to English language training to improve their language skills through the proceeds of the PHRD Grant (TFO53200) and then sent for training organized preferably by ILO at Turin /Italy, according to their needs for further development of procurement knowledge and qualifications. A local procurement consultant will be hired to support the TCDD procurement staff to be assigned for this project.

The initial overall project risk for procurement is high. The risk rating will be re-evaluated after one year of Loan effectiveness and adjustments made accordingly. During the project launch workshop, the Bank will organize a training program to the TCDD personnel who may be involved in the procurement activities to introduce the Bank's Guidelines and standard bidding documents to be used in the implementation of the project.

The Borrower through TCDD, at appraisal, developed a procurement plan for project implementation, which provides the basis for the procurement methods. This plan has been agreed between the TCDD and the Project Team on May 6, 2005. Among the other procurement items, it consists of ICB contracts amounting US$132.6 million, and QCBS consulting services contracts estimated to cost US$3.8 million. The Procurement Plan will be updated in agreement with the Project Team semi-annually or as required to reflect the actual project implementation needs and improvements in institutional capacity

4. Social

The overall impact of this project will be country-wide and positive, although it will have a negative impact on some employees who are released due to restructuring. Measures are included to mitigate this impact, however, by making the downsizing process transparent, maximizing voluntary retirement, providing various support mechanisms to assist employees adjust, and implementing the program at a pace that will enable affected workers to prepare in advance for the change.

The project supports the Government's policy to improve the country's railway network and make rail transportation more effective and safe. Improved railway transport networks and services are also expected to attract foreign and local investors to do business across the country and not only around the largest cities. This, in turn, is expected to contribute to more evenly distributed economic growth and reduce regional disparities. Reliable transport services facilitate access to schools, health and job markets.

TCDD has operated under a policy of no hiring/no layoff for a decade or more, and a reduction in employment levels was achieved through natural attrition and the special provisions that provided an additional lump sum top-up of 20 percent over the "end of service" compensation to workers eligible for early retirement. For this reason, there is little TCDD experience dealing with the social impact on railway workers of a broader program of staff adjustment associated with restructuring. However, there is recent experience with social impact associated with the privatization of state enterprises upon which the proposed component draws.

According to the recent social monitoring survey data in the Bank's Privatization Social Support Project (PSSP), the most vulnerable group is prime age workers with families and financial commitments between 30-45 years of age and not those close to retirement as was originally anticipated when the PSSP was implemented. The main beneficiaries of "end of service" or severance compensation in the proposed project will be determined when specific functional areas of redundancy are identified by TCDD with the assistance of a specialized consultant.

Two stakeholder workshops were held during appraisal that provided opportunities to discuss the implications of the TCDD business plan and associated restructuring on the labor force with senior management, union leaders, external stakeholders, and middle-level management, respectively. These will be followed by similar workshops when subsequent consultant reports are released, and during the preparation of a detailed implementation plan, to offer an opportunity for stakeholder input at each stage. TCDD will also launch an ongoing information campaign to keep employees and the public aware of the changes that are planned and underway, in order to help employees anticipate and adjust to the changes. In addition, TCDD will set up an independent social monitoring program to monitor and assess social impacts of restructuring and to identify unanticipated impacts that need to be addressed.

5. Environment

The project is in full compliance with all environmental regulations, policies and procedures of the Government of Turkey and the World Bank. In accordance with World Bank safeguard policies, the project is rated environmental category B and an Environmental Management Plan (EMP) acceptable to the Bank has been prepared by TCDD. The TCDD has conducted public consultations, and disclosed the Turkish language EMP publicly in Turkey at the TCDD Regional Offices at the end of February, 2005. The English language version of the EMP was received by the Bank on February 23, 2005 and was placed in the Infoshop on March 3, 2005. The English language version of the EMP is also included in the project files.

The project is expected to have minor negative impacts on the environment. Only the implementation of the signaling program (component A of the project) can trigger environmental issues. Inevitably, the digging of trenches for electrical cable and erection of poles will introduce noise, disturb the ecosystem near railway tracks and may disturb the public at intersections of roads and railroad, due to the movement of men, equipment and materials. These slight negative impacts will be limited to the construction phase. Once the project is completed, the improved traffic flow may increase air and noise pollution along the railroad. However, the reallocation of traffic from road to rail will result in reduction of congestion, and higher reduction of pollution caused by hydrocarbons, particulates and lead. The net result will be a diminution of pollution caused by traffic. No resettlement or land acquisition is involved.

The World Bank policy on cultural heritage will not be triggered, as all the works will be implemented in a zone that has already been explored during the construction of the railroad. However, the Environmental Management Plan includes a requirement that all construction contracts contain a provision regarding handling of unexpected findings of items of cultural significance in accordance with Turkish regulations on cultural property.

6. Safeguard Policies

Given the nature of the interventions supported by the project, the project does not trigger any social safeguard policies. However, it is quite likely that the implementation of the proposed sector reform agenda will generate a number of social issues that will require the Borrower's careful attention throughout the project implementation period. To manage this process, TCDD will establish a social impact monitoring program to follow the reform process and enable it to deal with unexpected social impacts of the redundancy program. This will complement the greatly expanded consultation process that has been launched, including public consultations and internal staff and worker briefings that reach all concerned stakeholders, as well as a targeted, user-friendly public information campaign that keeps employees aware of changes underway and those that will follow:

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[x]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[x]
Pest Management (OP 4.09)	[ ]	[x]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[ ]	[x]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[x]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[ ]	[x]
Forests (OP/BP 4.36)	[ ]	[x]
Safety of Dams (OP/BP 4.37)	[ ]	[x]
Projects in Disputed Areas (OP/BP/GP 7.60)[10]	[ ]	[x]
Projects on International Waterways (OP/BP/GP 7.50)	[ ]	[x]

7. Policy Exceptions and Readiness

The Project complies with all applicable Bank policies. The engineering design documents for the first year's activities are complete and ready for the start of project implementation. The procurement documents for the first year's activities are complete and ready for the start of project implementation. The Project Implementation Plan has been appraised and found realistic and of satisfactory quality.

[10] *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas*

Annex 1: Country and Sector or Program Background

TURKEY: RAILWAYS RESTRUCTURING

Only four years ago the Turkish economy suffered a serious crisis, leading to the devaluation of the currency by some 50 percent, a jump in nominal interest rates to 100 percent, the virtual collapse of the banking system and the bankruptcy of scores of enterprises. At the end of 2001, Turkey registered a 10-percent decline in GNP, inflation was on the order of 70 percent, and the net public debt to GNP ratio reached 94 percent.

Turkey's economy has rebounded from this crisis, and economic growth has been strong since 2001 (namely 8 percent in 2002, 6 percent in 2003 and an close to 10 percent in 2004). At the same time, inflation has been brought under control reaching single digits (9.3 percent) in 2004, the lowest in Turkey for thirty years. Net public debt to GNP has decreased significantly to 63.5 percent by end-2004. This impressive macroeconomic performance has been achieved through a combination of stabilization measures, with strong fiscal discipline at its core allowing the maintenance of large primary surpluses of the public sector on the order of 6.5 percent of GNP, an ongoing structural reform agenda that was initiated by the previous Government, and followed by the current one, and political stability since the November 2002 elections. As a result Turkey's economy has become significantly more resilient to external shocks over the past two years. Nonetheless, risks do exist which should not be underestimated, such as if there were to be a sharp change in the global economic scene, a potential rise in interest rates which would affect the Government's ability to roll over public debt, or possible reform fatigue in Turkey.

The decision of last December's EU summit on the opening of accession negotiations in October 2005 has been an important signal for the financial markets and has created a firm anchor for Turkey's development in the years ahead. As observed elsewhere, the process of accession provides a strong incentive to continue with political, macroeconomic and structural reforms. Turkey's own pre-accession program sets out ambitious objectives including 5 percent growth and the reaching of the Maastricht gross debt criteria of 60 percent of GNP in 3 years. The potential for significant FDI could also be unlocked by the prospect of EU membership, although this will take time to build up.

A new 3-year Stand-by Arrangement (SBA) has been agreed on with the Fund. A Fund program and an ongoing EU accession process will serve as powerful external anchors. It is expected that the focus of the EU reforms will shift from emphasizing political criteria to economic ones ensuring an anchor for the reform process into the medium term.

Background

The Government of Turkey initiated a number of economic reforms to contain spending, cut its deficit, reduce inflation, and provide a basis for renewed economic growth. The Government has mapped out a structural reform program encompassing measures to address the biggest sources of fiscal deficits, strengthen the legal and regulatory frameworks, and accelerate the privatization of the remaining state enterprises. Reform of the Turkish Sate Railways (TCDD) is one of the main targets for change. Over the past few decades, TCDD has fallen into a financial crisis from which it will not be able to emerge without a dramatic restructuring of its governance and organization.

TCDD, the Turkish State Railways operates the national railway, the seven largest ports, and manufactures and repairs locomotives, wagons, passenger coaches, as well as sleepers and switches. Created as a result of the nationalization of the railways in 1924, TCDD was set up as a State Economic Enterprise (SEE) in 1953. As a State owned enterprise, TCDD has the monopoly of any railways related activities. Yet, it is currently the largest money loser among Turkey's public sector enterprises: in 2004, TCDD operational loss amounted to US$548 million.

The railway related activity is the largest element of TCDD, i.e., about 85% of TCDD total operating costs but slightly less than 50% of its operating revenues in 2003. During the period 1993-2002, the railway cost the government about US$7.5 billion, averaging about US$750 million a year, or 0.4% of GDP. If this figure is comparable with other countries, Turkey's particularity lays in the efficiency of rail operations that is low above average of lower middle-income group ECA countries. Although ports (highly profitable) related activities are cross-subsidizing TCDD revenues, its overall income does not cover the cost of its staff[11], which represents 180% of railway revenue. The staff totals about to 39,000 of which about 10,000 are employed at ports or at non-core affiliated companies. The railway traffic market share has been steadily decreasing since the 1950's to become marginal, reaching in 2003 2% of passenger-km and 4 % of freight ton-km. The decline in traffic share is the result of: (i) a lack of investment in infrastructure; and (ii) the rapid growth of road transport in the past decades, while the railway's traffic grew at a slower pace (+2% per year).

Structure of the Transport Market and the Role of the Railway

Transport demand in Turkey has grown significantly over the past five decades. Overall, demand (as measured by passenger-kilometers and ton-kilometers) has grown at an annual rate of nearly 8% since 1950. Demand for Road transport has grown at an annual rate of about 7.6% while rail transport demand grown at about 2%, demand for water transport by 5% and air at over 16% per year. As in most developing countries, road transport is becoming a much more significant factor for both freight and passenger transport.

Road transport represented about 37% and rail 55% of the total transport market in 1950. By 2000, road transport represented 93% of the total market, rail about 4%, water about 2% and air 1% of the total intercity transport market in Turkey. While the current rail transport task is not insignificant, it is certainly much less important to the economy of Turkey than in the past. Although TCDD's rail traffic market shares have declined significantly, overall railway traffic has grown somewhat. Total TCDD railway traffic units[12] have grown at about a 2% annual rate. Freight services have grown at an annual rate of about 2.3%; Suburban services have lost traffic at about 3% per year, while intercity passenger traffic has increased by about 1% per year.

In the past, it was argued that the railway could be more competitive and commercial if it reduced its cost structure and thus able to reduce its tariffs. This argument can no longer be made—freight prices already reflect a low cost structure. Over the past 20 years, TCDD has significantly reduced its freight tariffs. Low tariffs, set at levels of the most efficient railways in the world, have not helped TCDD attract freight traffic. Over the same period, TCDD has not done much to reduce its cost structure and now generates very large loses. TCDD is in the curious position of decreasing freight tariffs while increasing passenger tariffs, thus shifting relative government transport benefits from passengers, most likely poor, to major industrial concerns. To become a commercial enterprise, the railway will have to be radically reduced in size, service improved, and tariffs increased.

[11] As imposed by the current Railways Law, Treasury has to financially cover TCDD staff cost on a monthly basis, which clearly does not encourage TCDD to reduce its excess of staff.

[12] Traffic units are defined as ton-kilometers of freight traffic + passenger-kilometers of passenger traffic.

TCDD Legal Status

The Decree Law No 233 dated June 18, 1984 and the Statues of the Republic of Turkey General Directorate of State Railways Administration (TCDD) adopted pursuant to the Decree law , establish the legal status of TCDD, its purpose and field of activity, organisation structure, institutions and subsidiaries and affiliates. These establish TCDD as a State Economic Enterprise (SEE) affiliated to the Ministry of Transport for the following purposes: (i) to operate, enlarge and renew the railways, ports and piers delivered to it by the State; (ii) to direct its affiliated corporations and shared in accordance with the laws and regulations within the framework of development plans and annual programmes; (iii) when necessary, to carry out all kinds of complementary activities regarding rail transport such as maritime and inland transport including ferry operations; (iv) to manufacture rolling stock and similar vehicles, establish warehouses, depot and passenger facilities; (v) to undertake railway construction works home and abroad; and (vi) to fulfil all tasks entrusted by the Council of Ministers related to its field of activities.

There are two types of SEE in Turkey and TCCD is a State Economic Organisation (SEO), which is a SEE established to provide a monopoly service. TCDD has monopoly rights in the transport of passengers and freight by rail in Turkey. State Economic Enterprises are governed by Decree by Law number 233. Amongst other things, Law 233 defines the arrangements by which SEEs and TCDD are governed and managed. TCDD is managed by a Board of Directors, which has 6 members, including the General Manager of TCDD who acts as the President of the Board of Directors. The General Manager of a SEE is appointed on the basis of the recommendation of the relevant Minister with the approval of Government. Of the remaining Board members: two are appointed by the Ministry of Transport; one by Treasury; and two on the recommendation of the Ministry of Transport, selected among the Deputy General Managers of TCDD and approved by Government. The period of tenure of Board members is 3 years.

As set out in Law 233, SEEs should operate according to 'basic economic and commercial principles'. The Board of Directors is responsible for these decisions, but because they are public enterprises, their decisions should be consistent with Government policy. Budgets, investment and finance plans require the approval of the High Planning Council. Article 35 of Law 233 states that SEEs are free to set the prices for the commodities and services that they produce. However, it also states that Government (the Council of Ministers) may set prices. TCDD is free to set its price and tariff levels but in practice these are subject to considerable influence by the Ministry of Transport and politicians, such that they require, in effect, Government approval. Any losses that occur as a result of Government changes to tariffs are supposed to be compensated in the following year's budget by a subsidy equivalent to the cost plus 10%.

Organization of the TCDD

TCCD's current organisational structure is shown in the figure below. TCCD is organised on a functional basis and is highly vertically integrated, it is responsible for both infrastructure construction and maintenance and train operations and buys in few services from outside of the organisation. TCDD has a regional structure comprising of seven regions. Most of the staff of the functional departments are based in the regions and report to regional headquarters. TCDD has recently tried to remove the regional structure as part of implementing a business unit structure but with limited success as many senior staff remain in place despite their positions disappearing in the structure. The main functional Departments are presented below.

Commercial Department – the main task of the commercial department is to plan and organise passenger train services, including the setting of fares, the marketing of train services, the timetabling of services, direct ticket sales and the collection of revenue. The commercial department will become the ***Passenger***

Business Unit in TCDD's proposed new organisation, possibly split into separate Long distance and Suburban passengers units.

Movement Department – the main task of the movement department is customer contact activities, predominantly freight, at stations and trains and organising trains and the shunting of freight wagons. The movement department will become the ***Freight Business Unit*** in TCDD's proposed new organisation.

Installations Department. The installations department is responsible for designing, constructing, operating and maintaining signalling, line electrification and communications systems and providing train dispatch services.

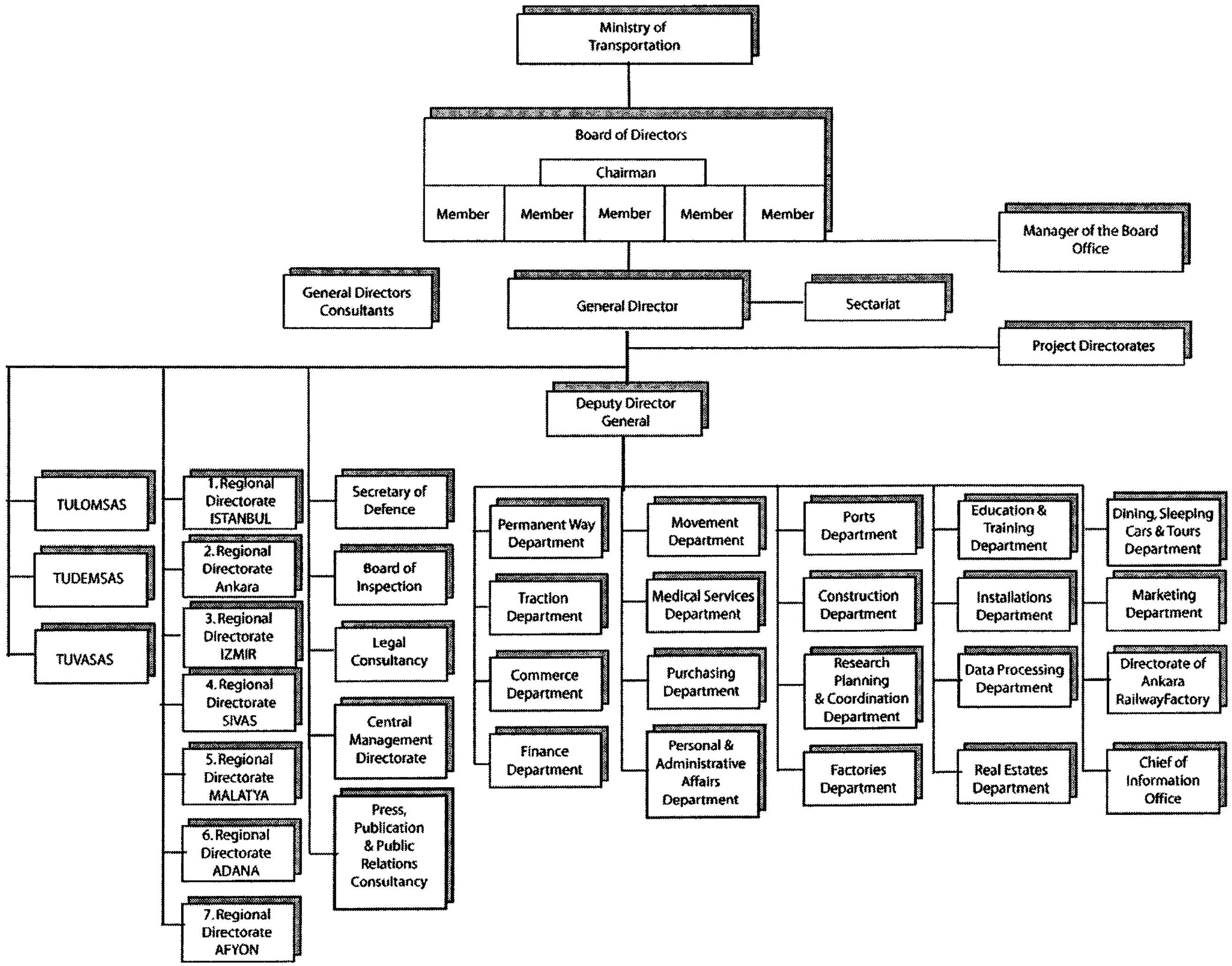
Permanent Way Department. The permanent way department is responsible for maintaining civil works such as tracks, roads, bridges, and tunnels.. The installations and permanent way departments will be combined in TCDD's proposed new organisation to form a single ***Infrastructure Business Unit.***

The Traction Department is responsible for operating and maintaining locomotives and passenger and freight rolling stock. Locomotive drivers are based within the traction department. The traction department will become a ***Workshop Business Unit*** within TCCD's proposed new organisation.

TCDD also owns and operates three affiliated companies, as follows: (i) Tulomsas – responsible for the manufacture of locomotives under licence; (ii) Tuvasas – responsible for the manufacture of passenger coaches; and (iii) Tudemsas – responsible for the manufacture of freight wagons. The affiliated companies also undertake the heavy overhaul and maintenance of TCDD's traction and rolling stock. It is the consultants' understanding that overhaul and maintenance is the prime source of work for the affiliated companies at present. TCDD also operates several factories within the permanent way department. These include a switch factory, two concrete sleeper factories and a rail welding facility.

TCDD owns and operates a total of 7 ports that have railway access: Haydarpasa, Mersin, Iskenderun, Derince, Izmir, Samsun and Bandirma. The ports are currently the only part of TCDD that are operating profitably and are cross-subsiding railway operations.

Figure: TCDD's Organisation Structure



TCDD Business Plan 2005-2010

TCDD, in close collaboration with the World Bank and consultants (CANAC/IBM), has detailed its short-medium term strategy in its 2005-2010 Business Plan approved by the TCDD Board of Directors in March 2005. The main objectives of the Business Plan are to: (i) improve its financial situation; (ii) establish a more client oriented structure; (iii) increase railway competitiveness and market share; (iv) integrate the national network into the European and Asian network; and (v) provide an equitable, secure and economic service for the users. The satisfactory implementation of the Business Plan is an integral part of the proposed project. The key actions planned to reach those objectives include the following:

1. Reorganization of the Entity

Structure shift: Early 2005, the freight and passenger units was separated from the core management, and established as 'operations' and 'commercial' departments, respectively. By end 2006, the current inefficient regional-based structure will be reorganized according to the following lines of business:

Business Units	**Sub-Sectors**
Freight	Bulk and others.
Passenger	Long Distance, Regional, Suburban
Infrastructure	Permanent Way, Traffic, Assets
Rolling Stock Maintenance	Workshops, Rolling Stock
Corporate Support Functions	Finance, Human Resources, IT, Purchasing, Real Estate...etc.

Introduction of MIS: In order to facilitate the above reorganization, a management information system (MIS) will be introduced in the company by end of 2006, comprising in particular an accounting system, ERP and Operational MIS (OPMIS).

Staff rationalization: Natural attrition and hiring freeze since 1992 has brought up labor productivity to 500,000 TU/employee, but still far below western European levels. Staff rationalization is one of key restructuring measures prescribed in the Business Plan. The staff retrenchment program, targeted to eliminate redundant positions, will bring down the number of staff in a significant proportion which will contribute to reduce railway deficits.

Non-core activities: The status of non-core activities will be revised: (i) the ownership and management of the 3 affiliated companies[13], are to be partly transferred to the private sector; (ii) the sleepers factories and switch company are under evaluation to prepare an eventual privatization through management contract while the rail welding and ADF rolling stock companies will remain under TCDD's control; and (iii) the surplus real estate owned by TCDD will be sold or leased, leading to an additional revenue estimated to US$60 million per year.

2. Modification of Relations with Government

The two railways laws under preparation will set the legal framework for contractual relations between TCCD and the Government. By 2006, TCDD, in cooperation with the EU technical assistance, will have prepared Public Service contracts and defined Public Service Obligations.

[13] TULOMSAS, locomotives manufacturing and maintenance; TUVASAS, passenger rolling stock manufacturing and maintenance, TUDEMSAS, freight rolling stock manufacturing and repair.

3. Increasing Freight Market Share

TCDD is aware of the potential market for rail freight transport, but also of its current poor commercial orientated customer relations. The Business Plan includes a detailed freight traffic forecast by commodities and sets the following short term strategies, in order to attract freight customers:

- Increase running of block trains in parallel of decreasing shunting operations;
- Reduce turn around cycle by 50% and improve dispatching and tracking of wagons, supported by the centralization of marketing and traffic activities and the introduction of the OPMIS system;
- Introduce elastic-sensitivity based pricing: thus the freight tariff is foreseen to increase by an average 4% per year during the next five years;
- Develop combined transport operations; and
- Reduce the number of freight stations.

4. Passenger Traffic

Mainline services: The main objective is to eliminate the substantial loss created by servicing passenger services. The Business Plan plans the closure of all uneconomic lines that will not be compensated by the government under the Public Service Contracts. An additional major target is to transform relations with passengers into customer relationship instead of 'user-relationship' by (i) providing services based on customer demand analysis; (ii) introduction of external marketing communication; and (iii) transfer of ticket sales to agencies and websites. Flexible Pricing[14] will be introduced, based on the improvement of quality and reduction of journey time. The implementation of signaling systems on new sections will allow the closing of nearly empty stations and rationalization of staff.

Suburban lines: TCDD has initiated the transfer of the responsibility[15] of suburban services to municipalities. By early 2006 Izmir will become the most significant revenue earning activity, transporting on average 120 million passengers annually.

Ankara-Istanbul high Speed train: The US$1.5 billion investment for the construction of a 3 hour connection between Ankara- Istanbul is financially viable, given the estimated annual revenue of US$100 million by 2010 with an estimated traffic volume of 9 million passengers.

5. Infrastructure and Rolling Stock

Permanent way activities will be improved by: (i) rationalizing of equipment and service wagons with the scrapping of 200 wagons and the adjusting the level of staff to the optimum level; and (ii) transferring the maintenance responsibility to the central headquarters. The signaling component of the project, including the lengthening of crossing loops financed under the World Bank loan will increase line capacity and the running of longer trains along major freight corridors. TCDD plans to electrify 3000 km of line along the east west axis.

The numerous and scattered rolling stock maintenance workshops will be consolidated in order to improve effectiveness of maintenance. The projected procurement of new rolling stock, evaluated to about 300 US$ million will reduce significantly the present level of maintenance and repair of obsolete wagons.

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[14] Today the government decides ultimately of tariffs levels. The new legal framework will allow autonomous tariff setting.

[15] Operations will be carried out by TCDD; pricing, scheduling will be set by the local authorities.

6. Safety and Security

The business plan lists Security and Safety at the top of TCDD's agenda for the next five years. Safety and accident prevention needs to be thoroughly strengthened within TCDD from management to workers. Safety policies exist in principle, but are absent in practice. In order to assess the situation, an independent operations safety audit will be financed under the project leading to clear recommendations on how to improve the situation and to make Turkish railways at par with best European performers. These recommendations, once endorsed by TCDD management will be translated into a Safety improvement action plan, including realistic targets and performance monitoring indicators.

7. Investment Program

The table below summarizes the tentative investments program foreseen in the short medium term which is to be reviewed and adjusted according to financial analysis findings.

	Physical	**Financial (1,000 YTL)**	**Financial (US$ million)**
Infrastructure			
Ankara-Istanbul Rehabilitation		2,097,000.00	1,398.00
İncirlik-Toprakkale 2. Line (Km)	68	57,000.00	38.00
CTC (Km)	2302	770,000.00	513.33
Electrification (Km)	3004	695,300.00	463.53
Track Renewal (Km)	2304	748,500.00	499.00
Track Rehabilitation (Km)	175	30,500.00	20.33
Track Mechanization (IV)		60,500.00	40.33
Rail Welding (Number)	80000	12,500.00	8.33
Switch Renewal (Number)	1250	46,250.00	30.83
Improvement of Track		433,000.00	288.67
Rolling Stock			0.00
Locomotives			0.00
DE Main Line Locomotive (Number)	71	272,000.00	181.33
Electrical Main Line Locomotive (Number)	60	400,000.00	266.67
Electrical Suburban Locomotive (Number)	32	176,000.00	117.33
Wagons			0.00
Passenger Coaches (Number)	340	271,000.00	180.67
Freight Wagons (Number)	2500	418,000.00	278.67
Automatic Couplers (Number)	6700	30,000.00	20.00
MIS Projects		35,820.00	23.88
Other		1,481,835.00	987.89
Total		**8,035,205.00**	**5,356.80**

Source: TCDD Business Plan 2005-2009

Draft Letter of Sector development Policy (Signed in December 30, 2004)

During the project preparation initiated in 2003, the project team and the Steering Committee have had a constructive policy dialogue and discussed in detail the content of the Letter of Sector Development Policy which was signed by the Minister of Transport and Communication on December 30, 2004 (attached below).

TURKEY – Railways Restructuring Project: Letter of Sector Development Policy
(Signed December 30, 2004)

REPUBLIC OF TURKEY
MINISTRY OF TRANSPORT

International Bank for Reconstruction and Development
Mr. James D. Wolfensohn
President of
The World Bank

Dear Mr. Wolfensohn,

Within the World Bank Group country assistance strategy for the period FY04-06, the Government of Turkey has committed itself to implement fundamental reforms to reduce economic vulnerability and achieve high and stable growth. The proposed Country Assistance Strategy (CAS) aims at reducing the risk of reemergence of crises and helping Turkey address the many economic challenges of getting ready for European Union (EU) membership. The proposed assistance program for FY04-06 and the expected outcomes are structured around four development themes in line with the Government's priorities: (i) sound macroeconomics and governance; (ii) equitable human and social development; (iii) attractive business climate and knowledge; and (iv) strong environmental management and disaster prevention.

In this regard, it is foreseen to support the restructuring of Turkish rail sector. Rail services in Turkey are operated by The Republic of Turkey General Directorate of State Railways Administration (TCDD), which is a traditional, vertically integrated and state owned organisation. TCDD operates a network of 10.984 track-kilometres. The network is predominantly single-tracked (95 %), only 440 km is double-track, and is characterised by mountainous terrain, tight curvatures and steep gradients. 19 % of the network is electrified at 25kv, 50Hz. Concrete sleepers used on around 63% of the network. 23% of the network is signalized. There are around 180 km of tunnels and more than 24,000 bridges and structures on the network. Since 1950's only 1770 km of new railway was constructed. Many new railway projects prepared could not realized due to lack of funds.

In common with many rail companies throughout Europe TCDD's performance has declined in recent years. Passenger numbers have declined by around 50% during the 10-year period, to a market share of around 2%. Over the same period freight traffic has declined by around 10% to a market share of around 4%. At the same time TCDD's financial position is precarious. TCDD made a loss of 292 million US $ in 2003 and expected loss for the year 2004 is 513 million US $. Treasury has transferred 331 million US $ to TCDD in 2003. The cost coverage ratio in operations is realized as 23.6 % in passenger transport and 30.2 % in freight transport in 2003.

The most urgent needs of railways – financially sound, efficient and friendly to the environment mode of transport - compel such comprehensive TCDD restructuring, which would enable railways to compete effectively within the EU in a near future. The overall strategy of the Turkish Government is threefold: (i) to significantly reduce the current fiscal burden of TCDD on public finance, (ii) to increase the competitiveness of the Turkish economy by reducing the logistic costs associated with the inefficiencies of the railway and port sub-sectors; and (iii) to contribute to Turkey's accession to the European Union.

It is aimed to realize great changes at TCDD both in structure and technology in order to cope with the competition in the global market and increase the share of rail in the transport sector. Restructuring of TCDD is one of the commitments of Turkish Government included in the Accession Partnership and National Program for the Adoption of the "*Acquis*" of EU and also included in the Government's Emergent Action Plan.

More specifically, with restructuring:

Under the Railway Law; *"A new legal framework for railway activity will be put in place. Under this new framework which will be consistent with EU directives on railways (a) port operations presently under TCDD will be seperated from railway operations; (b) rail infrastructure will be seperated from operations, at least in the form of account seperation; (c) a clear distinction will be made between commercial railway activities, to be operated under a deregulated environment, and services operated under Public Service Obligation (PSO) scheme, to be operated under contractual arrangements between Government (national or local) and railway operators; (d) the railway operating company to be created from the restructuring of TCDD will be a limited-liability company and will be vested with full management autonomy; (e) the Government will be entitled to grant concessions for railway infrastructure construction and management and to issue licenses to private railway transport operators under conditions specified in the law; and (f) a new system of access charges for the use of infrastructure in accordance with EU standarts will be developed."*

Under the TCDD Law;"A new legal framework for TCDD will be put in place. Under this new framework: (i) TCDD work force will be adjusted through an acceptable gradual reduction of staff and uneconomic services will be discontinued, reduced or operated under a PSO scheme; (ii) TCDD's core infrastructure and operating assets will be modernized; (iii) responsibilities for suburban passenger services will be transferred to local governments and services will be provided under contract by TCDD or private operators; and (iv) all non-core services will be divested.".

In this framework, some activities mentioned below have already been initiated regarding the restructuring of Turkish railways which is to be completed by the end of year 2006.

KEY ACTIONS

I. Studies on-progress by EU Funds

First of all, considering the accession process to EU, the on-going restructuring studies have been evaluated for their alignment with the EU "*acquis*" in the field of rail transport with the support of European Commission between March-June 2003. As a result of this study, it is recommended to prepare and draft new laws (Framework law for rail sector & TCDD law) to comply with EU legislation regarding rail transport and an Action Plan for the period of 2003-2008 has been prepared including short and long term measures for railway sector. Projects included the Action Plan to be financed by EU are as follows:

1. Organization of the Railway Sector

This project involves establishing the necessary legislative basis for the rail sector in Turkey, in compliance with EU legislation. The contract has already been awarded which will be pursued under the responsibility of Ministry of Transport. The project involves the following activities:

- Preparation and drafting of new laws (Framework law for rail sector & TCDD law).
- Identification of bodies necessary according to EU regulations (Infrastructure Manager, Regulatory Body, License issuing Body, Safety Certificate issuing Body), their roles and responsibilities and location.
- Regulations and legally binding methodologies underlying the calculation of infrastructure charges, the publication of polices and the non-discriminatory application of methodologies.
- Regulations and legally binding methodologies underlying the allocation of infrastructure capacity, establishing a process for applying for infrastructure capacity, the publication of rules and procedures for applying for capacity and the non-discriminatory application of methodologies.
- Legally binding contracts defining the rights and obligations between infrastructure manager and applicants in respect of any allocation of capacity.
- Procedures, criteria and specific requirements to obtain railway operating licenses.
- Procedures, criteria and specific requirements to obtain railway safety certificates.
- Protection of consumer rights and settlement of dispute mechanisms and procedures for capacity charging and allocation, including measures for judicial review.

The preparation and drafting of new laws which will start in 2005 is planned to be completed in 18 months, i.e., end of June 2006. The draft laws, compliant with EU "*Aquis communautaires*" will be ready by September 2005 at the latest.

2. New TCDD Organization and Financial Relations with Government

This project which involves the technical assistance in establishment of business units and training of the business unit managers and technical assistance in defining Public Service Obligations, preparation of Public Service Contracts, analysis of General Financial Relations such as income, cost, subsidies, and cash flow will start in 2005. The restructuring process of the TCDD will be completed by end of 2006.

3. Management Information System-MIS

Tendering process for the procurement of MIS which will allow keeping accounts of business units and sub units separately, measuring and monitoring their financial performance will start in 2005.

II. Other Studies Initiated in TCDD Within the Framework of Restructuring

Important steps have been taken in TCDD regarding projects which are complementary adaptation of EU *"acquis" communautaires"*.

- TCDD is currently implementing an Employment Restructuring study carried out by specialized consultant CANAC under a Japanese PHRD grant. The objective of the study is to assess the feasibility and determine the costs and benefits of labour force adjustments in the restructuring period of TCDD, including an overall framework for the implementation of the staff adjustment.
- The change in TCDD Status, which gives private operators access to TCDD network has been completed and an opportunity is given to the private companies to operate their trains in TCDD lines.
- TCDD's Hospitals have been rented to the General Directorate of Social Security Institution (SSK) for 10 years. 405 hospital staffs were also devolved to SSK.
- Real estate not required for operational activities have been identified. To use in financing new railway investments, some of them were sold and process for the remaining ones is going on.
- The devolving works of Çankırı switch, Sivas and Afyon Sleeper factories to private management have been initiated so as to cut down their costs and increase their international competitiveness.
- In the scope of closing ineffective and inactive units, 9 permanent way workshops were completely closed and 5 of them have been transformed into Mechanical Workshops by closing their building sections.
- TCDD Board has decided to initiate studies for setting up new factories in with domestic and foreign firms on the existing premises of its three affiliated companies.
- TCDD has 99 depots and workshops for rolling stock repair-maintenance works throughout the network. Opening of these 99 depots and workshops to surrounding subsidiary industry by renting or work contracts is also on TCDD's agenda.
- Regarding the ports, a project namely "Strengthening of the institutional and management structure of Turkish State Railways' (TCDD) Izmir Port, and recommendations for amendments in the legal infrastructure for the alignment and implementation of EU and IMO regulations, for the improvement of the market position and maritime safety" project has recently been completed with the technical support of the Netherlands Government. According to the results of this pilot project, it is planned to implement this structure on other ports as well.
- In order to minimize the costs in freight transportation, the block train operations has already been started. This project has increased freight transporting distances, decreased shunting costs, improved commercial speed, and lessened turnaround time,. Hence with this application, it will be possible to transport more freight with less resource.
- To improve the container transport, which has the highest potential share in combined transport, the construction of inland container terminals (ICT) is continued. Up to now, an Inland Container Terminal (ICT) was built in Gaziantep.

III. Establishing a Management Information System (MIS)

To perform most of the work manually brings about greater rate of important employment utilization. With this respect, our Administration firstly worked on MIS and other important Information Systems project. Beside the benefit to be gained from personnel savings, it is expected to make eminent improvements in the costs reduction due to speeded decision making process.

More specifically, the MIS will include: (a) a real time *Freight Operations and Commercial Management* module to monitors all freight movements, and to controls all switching activities in the stations; (ii) a *Rolling Stock Management* module to assist the railway management in the planning of maintenance and repairs of all rolling stock; (iii) a *Railway Infrastructure Management* module to monitor the maintenance of all the railway infrastructure; and (iv) a *Train Circulation System* module that displays the status of all trains in circulation and allows to optimize the movement of trains on the railway network system. These MIS projects will be implemented in close cooperation with World Bank

In this regard, in order to support the restructuring studies mentioned above, we would like to use the **US$200 million credit, which allocated by World Bank's in the scope of CAS High Case scenario**, for the installation of signaling systems within the scope of the rehabilitation of infrastructure and operating assets, establishment of information and automation systems for doing modern operation, supporting integration with EU, restructuring of TCDD's staff and preparing social mitigation plan, and re-training the staff.

Proposed Projects:

Establishing Signaling System and Installations

The signaling is one of the indispensable element for modernized railway operations. It provides crucial contributions to ensuring of traffic safety, saving in employment and increasing of line capacity. Within this frame; by support of World Bank in Ulukışla-Boğazköprü-Yenice-Mersin-Adana-Toprakkale and Irmak-Zonguldak line sections signaling system shall be realized, as these sections have traffic density and also often suffer from operations bottlenecks. Complementary works will be also carried out, including extension to 750 m. of the loops within crossing stations, mechanical ventilation of tunnels, and optic fibres along the lines for improved communication, CTC centralization, improved railway interface at both the container terminal and the free zone within the port of Mersin, and rehabilitation of the oil charging facility.

By realizing this Project:

- Saving in manpower: In both line sections approximately 300 personnel will be saved from station personnel and line maintenance workers. Therefore the personnel expenditures will significantly be decreased.
- Saving in repair and maintenance costs of stations and their premises: After completing the project number of stations will be decreased by 70%, which are currently 86. By planned closing of 60 station premises and fixed installations, It is estimated approximately 1.5 Million $ will be saved from repairmen and maintenance expenditures in a year. Moreover,

transfer of mentioned fixed installations located in these stations will come up and nearly additional 1 Million $ of source will be obtained.

- Increase in line capacity: In aforesaid line sections at the present mainly single line operation is made. By putting signaling system into operation minimum 30% increase in line capacity will be achieved.
- Traffic Safety: It is obvious that by taking signaling system into service the important rate of occurred incidents will be taken under control.
- In this context, It is aimed to save around 25 Million $ per year and significantly increase the freight traffic revenues (from 45 Million $ In 2004 to 172 million $ in 2010) by installing signaling system on the aforementioned line sections.

Implementation of TCDD Staff Adjustment and Social Mitigation Plan

It is envisaged by parallel to implementation of restructuring process the number employee working in our Administration, including office personnel and workers, will lessen to level of 20,000. By the funds obtained it is targeted to provide transferring of important number office personnel to operation personnel by completing their re-training. On the other hand, should any personnel could not be assigned in any case, it is planned to retrench them again with the same funds, within the scope of mitigation plan under preparation.

Advisory Services to the MoT and the TCDD

This component will provide for technical assistance, consultancy services, and transaction advisory services to the Ministry of Transport and the TCDD as needed to complete the restructuring and to carry out – on a pilot basis – the decentralization and/or concession of some well targeted key activities such as urban passenger transport services in a major city and promotion of containerized cargo related services from one key port under TCDD management.

TCDD Staff Training and Re-training

This component would support the implementation of part of the TCDD 2005-2008 training program in the following fields: (a) railway procedures review and design; (b) operational performance monitoring; (c) improved communication and negotiation skills within the TCDD; (d) labour regulation on safety and health; and (e) other area

TCDD Public Communication and Periodic Surveys

This component would provide assistance for developing an efficient communication strategy within and outside the TCDD aiming to improve the poor image Turkish railways suffers from among the public. Periodic customers surveys would be conducted in order to track positive changes and to improve commercial strategy.

Finally, the support obtained from will facilitate requirements for an effective railway organization to compete in transport market of Europe and Turkey.

Yours faithfully,

Binali Yildirim
Minister of Transport

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

TURKEY: RAILWAYS RESTRUCTURING

Agency/Project	Effective/ Closing Date	Amount ($US million)	Objectives	Results	OED Rating (when applicable)
World Bank **Second Railway Project (loan 2739-TU)**	01/27/87 12/31/93	197.00	• Relieve key transport bottlenecks • Improve TCDD's operational efficiency and locomotive performance • Reduce TCDD deficit and thus the burden on Turkish finances	Improved diesel locomotive operations and availability Improved traffic safety through track renewal and signalling improvement Increased trained Failed to bring about TCDD's financial recovery	<u>Outcome:</u> Moderately satisfactory <u>Inst. Development:</u> Negligible <u>Sustainability:</u> modest <u>Bank performance:</u> Moderately satisfactory <u>Borrower performance:</u> Modest
World Bank **Road Improvement and Traffic Safety Project (loan L4048 L4909)**	06/20/96 03/31/03	250.20	• Improve traffic safety in state and provincial roads; • Reduce road transport costs through infrastructure improvements and protection of investments through rehabilitation of paved highways; • Improve of the operational overall efficiency of KGM; • Improve consideration of environmental factors in project selection and design.	Measurable reduction in traffic accidents and fatalities. Only 60% of the roads were upgraded. No improvement in the operational efficiency. Lack of trust between implementing agency and the Bank.	<u>Outcome:</u> Moderately satisfactory <u>Inst. Development:</u> Modest <u>Sustainability:</u> Likely <u>Bank performance:</u> Satisfactory <u>Borrower performance:</u> Unsatisfactory
EU **Action plan**	2004 - 2006	4.26	• Establish legislative basis on compliance with EU accession • Setting a Financial Management Information System (FMIS) • Reorganize TCDD by establishing and training business units • Contractual financial relations with government	On going	

Annex 3: Results Framework and Monitoring

TURKEY: RAILWAYS RESTRUCTURING

Results Framework

PDO	Outcome Indicators	Use of Outcome Information
The overall objective of the project is to improve the financial viability, productivity, and effectiveness of railway operations.	TCDD operating annual revenues would increase by at least 60% during the period 2004-2009 TCDD operating losses are significantly reduced, and the working ratio without subsidy would improve from the current 370 % to 200% by 2009;	Determine the capacity of the TCDD in using more effectively and efficiently the railway assets and equipment. Demonstrate TCDD's management commitment to: (i) significantly reducing financial support from National Budget; (ii) contribute to the Government efforts to reform the sub-sector; and (iii) promote the role of the private sector in railways operations.
Intermediate Results One per Component	**Results Indicators for Each Component**	**Use of Results Monitoring**
Component One: The most productive part of the freight network is modernized and freight traffic is increased significantly.	**Component One:** Freight traffic along the modernized network is increasing from 9.6 billion ton.km in 2004 to 11.6 billion ton.km in 2009.	**Component One:** Demonstrate the performance of both the TCDD operation and marketing departments in using the modernized assets.
Component Two: TCDD staff is adjusted in a socially acceptable way without social unrest.	**Component Two:** TCCD railway staff is reduced in a socially acceptable way.	**Component Two:** Demonstrate the capacity of TCDD management to implement the staff redundancy scheme through a continuous dialogue with unions.
Component Three: TCDD Business Plan is implemented successfully.	**Component Three:** TCDD restructuring is implemented successfully.	**Component Three:** Demonstrate the capacity of TCDD management to implement Government strategy.
Component Four: TCDD staff professional capacity is improved.	**Component Four:** Number of staff trained during the project implementation: 2,500	**Component Four:** Demonstrate the capacity of TCDD Human resource department in implementing the training and retraining program for the period 2005-2008.
Component Five: TCDD Public Communication and Surveys.	**Component Five:** independent surveys carried out: 3	**Component Five:** Demonstrate the capacity of TCDD to become more client oriented.

Arrangements for results monitoring for TCDD Railway services

		Target Values						Data Collection and Reporting		
Outcome Indicators	**Baseline (2004)**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
TCDD operating revenues would increase by at least 10% per annum. (US$ million)	243	260	280	290	380	390	420	Annually – Single report finalized by March 31 of following year.	TCDD accounting system	TCDD under monitoring from MoT and World Bank missions
TCDD operating losses are significantly reduced, and the working ratio without subsidy would improve. (%)	366%	320%	290%	270%	210%	200%	180%			
Results Indicators for Each Component										
Component One: Freight traffic along the modernized network is increasing from 9.6 in 2004 to 11.6 in 2009. (billion ton-km)	9.6	10.0	10.3	10.6	11.0	11.6	12.0	Annually – Single report finalized by March 31 of following year.	TCDD accounting system	TCDD and World Bank missions
Component Two: TCDD Railway staff reduced in a socially acceptable way.	29,050	Progress	Progress	Progress	Progress	Progress		Annually – Single report finalized by March 31 of following year.	TCDD human resource management system	TCDD and World Bank missions
Component Three: TCDD Business Plan is implemented successfully.	None	Progress	Progress	Progress	Progress	Progress		Progress on a semi-annual basis – Single	Progress reports and update of the TCDD Business Plan	TCDD and World Bank missions
Component Four: Number of staff trained 2,500 during the project implementation.	250	700	700	500	300	300		Annually – Single report finalized by March 31 of following year.	TCDD human resource management system	TCDD and World Bank missions
Component Five: Number of independent surveys: 3.	0/3	1/3		2/3		3/3		One report every two years	Report by independent specialized consultant	TCDD and World Bank missions

Annex 4: Detailed Project Description

TURKEY: RAILWAYS RESTRUCTURING

The project total cost is estimated to US$221.0 million and it includes the following components: (i) financially sound program of rehabilitation/modernization of infrastructure and operating assets to increase the capacity of the most active links within the Turkish railway core network; (ii) gradual but significant TCDD staff adjustment and social mitigation plan designed under a socially acceptable program; (iii) technical assistance and other advisory services to the TCDD for the implementation of its Business plan; (iv) staff training and re-training; and (v) TCDD public communication improvement.

Component A: Railway infrastructure modernization: This component includes

► Investments: (i) lengthening of crossing loops to 750 m. on the single-track Yenice-Bogäzköprü line; (ii) introduction of color-light signaling system with Central Traffic Control (CTC); (iii), mechanical ventilation of two long tunnels (PK299 and PK303); (iv) installation of an optic fiber communication trunk line; and (v) improvement of railway connections with the container terminal and the free zone and rehabilitation of petroleum products loading facilities in the Mersin area. Investment will allow:

- *Operation of heavier, longer freight trains.* Operation of such trains is presently constrained by the length of crossing loops in the stations. Crossing loops will be lengthened to accommodate 750m long trains. Another limitation on the operation of heavy trains presently comes from the fact that multiple diesel locomotives cannot efficiently operate in two tunnels on the Yenice-Ulukisla section ([PK299+360^{20}-303+168^{70}] and [PK303+583^{20}-305+684^{50}], and possibly additional tunnels as a result of the ongoing review study, because of lack of adequate ventilation in these tunnels. Mechanical ventilation will be installed;

- *Operation of more trains*, thanks to the introduction of a Central Traffic Control (CTC) block system. This system will also improve fluidity of traffic and improve safety of train movements. Installation of signaling equipment will be supplemented by installation of a modern telecommunication system; and

- *Improvement of rail freight loading/unloading facilities* notably in the port of Mersin for container traffic and creation of rail access to major potential customers in the Mersin area (including the petroleum products storage area and the Mersin Free Zone).

Component B: Staff Adjustment and Social Plan: The project will support the implementation of a staff adjustment program that will be made coincidently with the restructuring of TCDD assets and operating practices: A detailed analysis by consultant CANAC financed under a Japanese PHRD grant, indicates a future optimized TCDD workforce. A phased labor reduction and social mitigation plan is envisaged that would include Phase 1, based on the Letter of Policy Development, which states that the TCDD workforce will be adjusted through an acceptable gradual reduction of redundant staff and unjustified services. Phase 2, would be based on the Railway Law, which would include more specific incentives targeted on railway employees who are redundant. Pending legal advice, both Phase 1 (under APL1) and Phase 2 (under APL2) retrenchment would be based on targeting only railway employees that are redundant to ensure that the railway does not lose its critical skills.

Component C: Advisory Services to the TCDD: This component will provide for technical assistance to the TCDD as needed to complete the new institutional framework and implement restructuring of TCDD assets and operational practices. The following items will be included in this component: (a) audit of TCDD operations safety and preparation of a safety action plan; (b) market studies for freight services (including containers and petroleum products); (c) a study of passenger services and preparation of contracts for operation of some services under a Public Service Contract scheme; (d) technical assistance related to rail border crossing and trade facilitation on strategic corridors; (e) various services to support implementation of TCDD assets and operating practices restructuring; (f) consulting services for preparation of APL2; (g) financial audits of TCDD; and (h) internal control risk assessment study.

C.a. TCDD operations safety audit and preparation of action plan [US$400,000]: Safety and accident prevention is a top priority of successful railways which needs to be thoroughly strengthened within TCDD from management to workers. Safety policies exist in principle, but are absent in practice. In order to assess the situation, an independent operations safety audit will be financed under the project leading to clear recommendations on how to improve the situation and to make Turkish railways at par with best European performers. These recommendations, once endorsed by TCDD management will be translated into a Safety improvement action plan, including realistic targets and performance monitoring indicators.

C.b. Market studies for freight services, incl. containers and petroleum products [US$400,000]: The studies will aim at analyzing current freight market and their prospective development in the short and medium terms. A particular attention will be given to potential new freight services for key products including containerized cargo to/from main ports and petroleum products. Recommendations will be made to the TCDD on how to increase its share of the market from its main competitor the truck industry. Current technical and commercial basis of road transporters will be also assessed to allow TCDD to respond better to the demand and to adjust its tariffs along with the improvement of the quality of its services.

C.c. Rationalization and PSC scheme for passenger services [US$400,000]: The study will aimed at analyzing the passenger services, assessing the cost to run loss making services, reviewing and revising TCDD investment program for passenger services and preparing a draft multi-annual Public Service Contracts.

C.d. Rail border crossing trade facilitation on strategic corridors [US$500,000]: The proposed technical assistance will focus on streamlining rail border crossing operational procedures, within the framework of a regional approach which is targeting Rail Corridor IV and X. It will build upon lessons learned from the Trade and Transport Facilitation in Southeast Europe program (TTFSE) and the Railway Border Crossing studies in Balkan countries. Main operational problems the Kapikule (Turkey) – Svilengrad (Bulgaria) rail border crossing have already been identified, but the development and implementation of an appropriate action plan to tackle these problems is lacking. Apart from TA for this border crossing, the assistance could also extend to include the identification of operational border crossing problems at rail connections with Iraq, Syria, and Armenia (although the latter crossing is actually closed). Both TCDD Passenger and Freight Departments support the proposed assistance.

C.e. Support for the implementation of the TCDD restructuring [US$1.0 million]: Many of the actions included in the 2005-2010 Business Plan will imply specific studies to assist

TCDD management in its decision making process. For example, changes in the current organization of the TCDD will require well focused studies in a variety of sector such as human resource, operations, information technology, marketing, finance, relation with the railway users, etc... The agreed optimization of railways investment/maintenance program for railways infrastructure and freight operations will also require technical/economical/financial analysis to be carried out by specialized consultants. Punctual assistance will also be provided to the PIU during the implementation of the APL1 regarding its obligations pertaining to procurement, financial management of the project and environmental areas, for which individual national consultants may be mobilized on demand for short term assignments.

C.f. Consulting services for preparation APL2 [US$500,000]: All the preparation work for the APL2 will be financed under the APL1. Feasibility study, economic analysis and detailed engineering of the line capacity increase along the Irmak-Zonguldak will be financed under the APL1, as well as other required independent assessment pertaining to staff adjustment, development of OPMIS and other investment found relevant at the time of the APL2.

C.g. Financial audits of the TCDD [US$150,000]: The APL1 will finance all compulsory financial audits listed in the project loan agreement. Both project and entity financial statements, SoEs and Special Account will have to be audited by independent auditors acceptable to the Bank and on terms of reference acceptable to the Bank. The annual audited statements and audit report have to be provided to the Bank within six months of the end of each fiscal year.

C.h. Internal control risk assessment of the TCDD [US$50,000]: The assessment is aiming to improve TCDD Internal Control system and performances.

Component D: TCDD Staff Training and Re-training: This component would support the implementation of part of the TCDD 2005-2008 training program in the following fields: (a) railway procedures review and design; (b) operational performance monitoring; (c) improved communication and negotiation skills within the TCDD; (d) labor regulation on safety and health; and (e) other areas.

Component E: TCDD Public Communication and Periodic Surveys: This component would provide technical assistance for developing an efficient communication strategy within and outside the TCDD aiming to improve the poor image Turkish railways suffers from among the public. Periodic customer surveys would be conducted in order to track positive changes and to improve commercial strategy.

Component F: Project Implementation costs: PCU Incremental Operating Costs include PCU staff salaries (excluding government employees) and staff per diems and lodging as well as travel costs for field trips related to the implementation of the project, supplies, utilities, sanitary cleaning, communication and security cost including internet, transport costs for training of IPCU staff, seminars and workshops, office equipment, hardware and software, furniture and M&O including fuel, service and car insurance for vehicles and procurement/leasing/renting of vehicles.

Annex 5: Project Costs

TURKEY: RAILWAYS RESTRUCTURING

The tables bellow provide the details of the project cost.

Project Cost By Component and/or Activity (*US$ million*)	**Local**	**Foreign**	**Total**	**Cost including Contingencies**
A - Modernization of infrastructure	45.4	64.8	110.2	134.6
B - TCDD staff adjustment & social mitigation	74.2	0.0	74.2	81.5
C - Advisory services to the TCDD	0.3	2.8	3.1	3.4
D - TCDD staff training and re-training program	0.1	0.4	0.5	0.6
E – Public communication and surveys	0.2	0.0	0.2	0.2
F – Project Implementation costs	0.1	0.6	0.7	0.7
Unallocated:				
Total Baseline Cost	120.3	68.6	188.9	
Physical Contingencies	8.3	6.7	15.0	
Price Contingencies	14.3	2.8	17.1	
Total Project Costs	**142.9**	**78.1**	**221.0**	**221.0**
Interest during construction				
Total Financing Required	**142.9**	**78.1**	**221.0**	**221.0**

TURKEY
Railway Restructuring Project

Components Project Cost Summary	**(YTL Million)**			**(US$ Million)**		
	Local	**Foreign**	**Total**	**Local**	**Foreign**	**Total**
1. Line capacity increase	68.1	97.3	165.3	45.4	64.8	110.2
2. Technical Advisory Services	0.5	4.1	4.6	0.3	2.8	3.1
3. Staff adjustement	111.3	-	111.3	74.2	-	74.2
4. Training	0.2	0.6	0.8	0.1	0.4	0.5
5. Communication	0.3	0.1	0.3	0.2	0.0	0.2
6. Project implementation costs	0.1	0.9	1.0	0.1	0.6	0.7
Total BASELINE COSTS	180.4	102.9	283.4	120.3	68.6	188.9
Physical Contingencies	12.4	10.0	22.4	8.3	6.7	14.9
Price Contingencies	21.5	4.3	25.7	14.3	2.8	17.2
Total PROJECT COSTS	214.3	117.2	331.5	142.9	78.1	221.0

TURKEY Railway Restructuring Project **Components by Financiers** (US$ Million)	**The Government**		**International Bank for Reconstruction and Development**		**Total**	
	Amount	**%**	**Amount**	**%**	**Amount**	**%**
1. Line capacity increase	20.0	14.9	114.5	85.1	134.5	60.9
2. Technical Advisory Services	0.0	-	3.4	100.0	3.4	1.6
3. Staff adjustement	16.3	20.0	65.2	80.0	81.5	36.9
4. Training	0.0	-	0.6	100.0	0.6	0.3
5. Communication	-	-	0.2	100.0	0.2	0.1
6. Project implementation costs	0.0	-	0.7	100.0	0.7	0.3
Total PROJECT COSTS	36.3	16.4	184.7	83.6	221.0	100.0

TURKEY Railway Restructuring Project **Project Components by Year -- Base Costs**	**Base Cost (YTL Million)**					**Base Cost (US$ Million)**				
	2005	**2006**	**2007**	**2008**	**Total**	**2005**	**2006**	**2007**	**2008**	**Total**
1. Line capacity increase	18.2	73.1	70.7	3.4	165.3	12.1	48.7	47.2	2.2	110.2
2. Technical Advisory Services	-	2.6	1.9	0.1	4.6	-	1.7	1.3	0.1	3.1
3. Staff adjustement	20.3	21.0	35.0	35.0	111.3	13.5	14.0	23.3	23.3	74.2
4. Training	0.1	0.2	0.2	0.2	0.8	0.0	0.2	0.2	0.2	0.5
5. Communication	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.2
6. Project implementation costs	0.3	0.3	0.3	0.3	1.0	0.2	0.2	0.2	0.2	0.7
Total BASELINE COSTS	38.9	97.3	108.2	39.0	283.4	25.9	64.8	72.1	26.0	188.9
Physical Contingencies	2.8	8.5	8.9	2.1	22.4	1.9	5.7	6.0	1.4	14.9
Price Contingencies	1.0	8.2	13.1	3.4	25.7	0.7	5.4	8.8	2.3	17.2
Total PROJECT COSTS	42.7	113.9	130.3	44.6	331.5	28.5	75.9	86.9	29.7	221.0

Annex 6: Implementation Arrangements

TURKEY: RAILWAYS RESTRUCTURING

Overall Project Management. TCDD through PIU will have the responsibility for overall project management and coordination. The TCDD has developed significant capacity in preparation and implementation of bidding documents, in cash flow calculations and payments, and with the advice of its experts (engineer and financial analyst) TCDD is found capable of implementing the proposed project. The project components will be implemented by the General Directorate of State Railways (TCDD).

Project Implementation Unit. The PIU has been established in the Research Planning and Coordination Department. Respective Departments within the TCDD will be responsible for project implementation, monitoring, financial management, as well as procurement. .

The PIU will be the central unit responsible for day to day operations of the project and will work with all related departments on matters related to project preparation and implementation. The PIU would be led by a Project Director who will report to the TCDD General /Deputy Manager which in turn will report to the Minister of Transport. The procurement specialist of the PIU would be hired under service contract. During the project preparation, some funds from the PHRD Grant have been used to train the PIU staff.

The core staff of the PIU, including the PIU Director, procurement specialist, financial manager, accountant, disbursement officer, executive secretary, and translator will be assigned by the TCDD and outsourced as consultants[16]. The core PIU staff comprising the PIU Director, procurement and FMS specialists will be employed on a permanent basis until the completion of the APL1, and beyond if the APL2 materializes.

World Bank Supervision. The World Bank will devote about 30 staff weeks per year and a total of about 120 staff weeks through FY05 to FY09 to help the Government in implementing the project and supervise progress. Implementation support and supervision – with a minimum of two missions per annum, -- as well as direct involvement of the Ankara Country Office specialized staff, will in particular focus on performance of the TCDD in managing contracts, procurement and financial matters, as well as in completing the agreed implementation plans.

Project monitoring during the course of project implementation and after the project has been completed would be carried out by the PIU staff, with the assistance provided by other TCDD specialists, in close cooperation with Treasury. This would entail updating TCDD business plan on a regular basis, auditing of financial statements, and monitoring project performance indicators for the duration of the project. Project progress reports would be prepared by the PIU on a semi annual basis and submitted to the Bank's review. The progress reports will focus on results rather than providing process related information.

Procurement. The PIU shall coordinate the following procurement tasks to be carried out by the various specialized departments of the TCDD during project implementation:

[16] Outsourcing is related to procurement and financial management specialists.

- implementation of the respective project components;
- implementation monitoring, including compliance with the relevant Bank policies;
- developments of terms of reference for the activities under their jurisdiction;
- preparation of bidding documents and contracts for works, goods and consultancy services;
- evaluation of bids;
- signing of the contracts;
- monitoring and management of contracts, certification and/or commissioning of delivered products;
- making payments to the contractors from the respective Special Account;
- monitoring the contracts which are subject to post review by the Bank and ensure compatibility to the Bank's guidelines and Loan Agreement.
- preparation for audit arrangements and reporting; and
- preparation of periodical progress reports; and monitoring of project implementation and evaluation of project impact.

Annex 7: Financial Management and Disbursement Arrangements

TURKEY: RAILWAYS RESTRUCTURING

SUMMARY OF FINANCIAL MANAGEMENT ARRANGEMENTS

An assessment of the financial management arrangements for the project is undertaken in December 2004 and updated in March 2005. TCDD institutional financial management arrangements are in need of improvement and temporary arrangements are undertaken to address the project financial management issues. These temporary arrangements will be relied upon until TCDD builds up its financial management capacity.

A summary of the conclusions for the project financial management purposes are as follows:

	RATING	COMMENTS
1. Implementing Entity	Satisfactory	There is a PIU established in TCDD. Names of financial staff are determined
2. Funds flow	Satisfactory	
3. Staffing	Satisfactory	Financial staff assigned
4.Accounting Policies and procedures	Marginally satisfactory	Accounting policies and procedures of TCDD should be improved.
5. Internal Audit	NA	No reliance on internal audit
6. External Audit	Marginally satisfactory	There are no IFRS and ISA audited financial statements available for TCDD. Higher Auditing Board (YDK) audit report has been reviewed.
7. Reporting and Monitoring	Satisfactory	
8. Information systems	Marginally satisfactory	TCDD does not have an integrated system but plans to install one by 2007.
OVERALL FM RATING	**Marginally satisfactory**	

Country Issues

A Country Financial Accountability Assessment for Turkey was carried out in 2001. The draft CFAA report identified some weaknesses in the Turkish financial accountability, in both the public and the private sector. Since 2001 the financial management environment has improved in Turkey.

State Economic Enterprises in Turkey are subject to basic accounting and auditing obligations which apply to companies in Turkey. These are laid down in the *Commercial Code*, which was last revised in 1956. More detailed requirements were introduced in the *Tax Procedures Law* of 1950 (which has since been consolidated into the *Tax Procedures Code*). Under the powers granted to it by the Code, the Ministry of Finance (MOF) introduced a Uniform Chart of Accounts which became effective on January 1, 1994. This prescribes certain fundamental accounting concepts, a code of accounts, and a format for the presentation of financial statements which, with the exceptions listed below, is applicable to all limited liability companies. (There are simplified requirements for small businesses, which constitute the majority of taxpayers by number). The purpose of these requirements is to provide information to the taxation authorities, there is no obligation to publish the financial statements, nor are they subject to a mandatory financial statement audit.

Financial statements of SOEs are audited annually by the Higher Audit Board (YDK), which functions under the Prime Ministry. As per provisions of the Public Financial Management and Control Law (PFMC), YDK will soon merge with the Turkish Court of Accounts (TCA), the Supreme Audit Institution (SAI) of the country. The YDK audit reports are submitted to the SOE commission of the Parliament.

Risk Analysis

A summary of the risk assessment for the project is as follows:

	Risk	***Comments***
INHERENT RISK		
1. Country Financial Management Risk	High	Based on CFAA report
2. Project Financial Management Issues	Moderate	
3. Counterpart funds	Moderate	
Overall Inherent Risk	Moderate	
CONTROL RISK		
1. Implementing Entity	Substantial	TCDD`s financial management environment is in need of improvement. Main transactions in the loan will be integrated into the company systems, however for detailed project accounting and reporting purposes a data base and excel spreadsheets will be relied upon.
2. Funds Flow	Moderate	TCDD needs to ensure that sufficient funds for the project are included in the annual budget.
3. Staffing	Negligible	
4. Accounting Policies and Procedures	Substantial	See 1 above
5. Internal Audit	N/A	
6. External Audit	Substantial	TCDD is currently audited by YDK which on an annual basis. YDK is an independent body, but the focus of the audits is more on compliance than on financial statements.
7. Reporting and Monitoring	Moderate	FMRs will be generated by the integrated excel sheets.
8. Information Systems	Substantial	TCDD does not have an integrated information system, but plans to implement one by 2007.
Overall Control Risk	**Substantial**	

Risk Mitigation Strategy

Country financial management risk – the project will be implemented by TCDD a state owned enterprise. TCDD has implemented two World Bank funded projects in the past and has set up a Project Coordination Unit for the Railways project.

Control Risk – TCDD has decided to implement an Enterprise Resource Planning Project (ERP) which will network the regions and the headquarters and facilitate sharing of data and timely preparation of consolidated financial reports and statements. To ensure that TCDD has a reliable financial management environment, installation of ERP is necessary. TCDD is committed to have the ERP functional in December 2007 and this will be a dated loan covenant.

The auditing arrangements for the entity will also be geared towards improving the financial management systems of TCDD as well as establishing a sound control environment. TCDD will engage consultants for carrying out a detailed review of internal controls which will identify gaps and weaknesses in internal control framework. The Bank, through supervision missions, will monitor implementation of the action plan to strengthen the internal controls in TCDD.

Temporary arrangements will be relied upon for detailed project accounting and reporting. The data base currently used for all foreign loans will be used for this purpose.

Implementing Entity

The TCDD through PIU will have the overall responsibility for project coordination. TCDD has implemented several foreign donor financed projects and in the past few years and therefore has developed capacity in preparation of bidding documents and cash flow forecasts.

PIU will be responsible for the day-to-day management of the project, including procurement, financial management, and liaison with the Bank team. PIU will be headed by a Project Manager with appropriate qualifications and experience and who will be deputed amongst current senior staff of TCDD.

TCDD has nominated the financial staff that will be working in the PIU. Accordingly, the PIU financial functions will be under the supervision of the vice president responsible for Financial Affairs, and project accounting, reporting and disbursement duties will be performed by a loans specialist and a loan officer.

The current information systems of TCDD are inadequate and integration of the accounting and reporting systems is required for sound financial management at TCDD. There is no network connection between regions and the headquarters and there is not a central data base for financial data storage. Therefore financial reports are produced manually. To address these deficiencies TCDD is considering implementation of ERP; an integrated system which will include a management information system, related hardware, software and procedural standards. TCDD systems will be relied upon to generate the project financial statements when the ERP becomes functional. Until then temporary arrangements will be relied upon for project accounting and reporting.

The risk associated with the implementing entity is assessed as substantial. The progress with building up the financial management capacity will be monitored closely by the Bank and necessary technical support in the area will be provided.

Funds Flow

There will be a special account for the project at the Central Bank of Turkey to be operated by TCDD. All payments to the contractors, suppliers and consultants will be made from this special account with the endorsement of the Project Director and the vice president responsible for project financial management.

A "Draft law on amending some laws and decree by laws" prepared by the Ministry of Finance is enacted in Parliament on March 22, 2005. Provisional Article No.2 of this law enables Turkish Railways Company (TCDD) to be treated as general and annex budget institution with respect to its foreign credits, even though TCDD is a state owned enterprise (SOE). This means that Treasury will be the borrower in case foreign credits extended to TCDD. Law no: 4749, Public Finance and Debt Management Law (no 4749) requires the borrower to be TCDD since it is a SOE and SOEs should be the borrowers themselves. The authority for determining the principles of implementing this article is given to the Minister in charge of Treasury. Accordingly, the borrower of the loan that will be given by the Bank for the Railways Restructuring Project will be the Treasury. Treasury will then allocate these funds to TCDD. These will be shown as transfers from Treasury in the financial statements of TCDD as equity infusions and TCDD will not be responsible for debt service.

Government institutions, including state economic enterprises, such as TCDD submit their planned investments for the coming year to the State Planning Organization (SPO) and Ministry of Finance (MoF) in June. Through discussions between the institution, SPO, and MoF, budget allocations for all institutions are finalized in December. Thus, it will be TCDD's responsibility to ensure that sufficient provision is made in the annual budget for the project. Counterpart funds for the project will be paid directly by the accounting department of TCDD and will be integrated into project accounting.

The risk associated with funds flow is considered as moderate. The responsibility to ensure that sufficient counterpart funds are included in the annual budget belongs to TCDD.

Staffing

The designated personnel in TCDD for having overall responsibility for the project financial management are the Deputy Head of the Department for Financial Affairs. He will be responsible for ensuring coordination with TCDD's regular Finance Department and there are two designated personnel from the loans department responsible for project accounting, reporting and disbursement.

TCDD has provided the names of designated personnel who will be responsible for project financial management. These staffs are civil servants and are currently working in the loans department of TCDD which deals with accounting and reporting of foreign loans.

The risk associated with staffing is considered as negligible.

Accounting Policies and Procedures

The main transactions that is the movements of the special account and project expenditures will be in the Company`s main accounting system. TCDD follows accrual basis of accounting. TCDD has adopted decentralized accounting, which is carried in 18 different locations besides the central accounting division at the headquarters. They have an Oracle 7.0 database on Unix

platform that is capable of generating trial balances. The system is not integrated and therefore each location sends monthly trial balance to the HO for consolidation and preparation of financial statements. The financial statements are prepared manually using Excel spreadsheets. TCDD uses a standard chart of accounts which is used by all the state economic enterprises in Turkey.
The current accounting system of the institution is quite old and is not integrated. Movements in the special account as well as the project expenses (paid from special account and counterpart funds) will be first recorded into TCDD's own financial accounting system and simultaneously a memorandum record will be maintained in a database to keep track of project expenses. Regular reconciliation will be made between the main accounting records and the database to ensure accuracy of project financial reports. The reporting for the project will be integrated into TCDD`s general system when the ERP is installed. ERP will include arrangements for producing detailed reports for project purposes. Until then project accounting will be maintained in the Loans Department of TCDD and project reports will be generated from the database that will be used for this purpose.

In order to provide guidelines for efficient project implementation and for ensuring uniformity, TCDD has prepared a project Financial Management Manual. The Manual describes the financial management system for the project.

The risk associated with accounting policies and procedures is considered as substantial. For project purposes the data base currently used for all foreign projects will be relied upon. The implementation of EPP is a dated loan covenant.

Internal Audit

TCDD has an investigation department which investigates irregularities noted in the institution, but it does not have an Internal Audit department .The enacted Public Financial Management and Control Law require internal control departments to be established at Government institutions. TCDD does not fall within the scope of this requirement under PFMC however it is still important that TCDD considers the establishment of a modern Internal Audit Department in line with the developments in the Country.

Reporting and Monitoring.

TCDD will maintain records and will ensure appropriate accounting for the funds provided. Financial statements for the project will be prepared by TCDD from the data base that will be used for project accounting. The Financial Monitoring Reports (FMR) will be prepared quarterly and will be submitted to the Bank no later than 45 days after the end of the previous quarter. The Bank and TCDD agreed on the formats and the contents of the FMRs and they include the following reports;

- Statement of Sources and Uses of Funds by categories
- Statement of Sources and Uses of Funds by Project Components
- Special Account Statement
- A detailed schedule for tracking disbursements against specific contracts.
- Procurement reports.

The risk associated with reporting and monitoring is assessed as moderate. The FMRs will be generated by the use of the database currently used for foreign loans.

Information Systems

TCDD has been using a database for the accounting and reporting of foreign funded loans. The same database will be used for Railways Project. The current accounting system of TCDD is old and therefore it is not possible to integrate detailed project accounting and reporting into the main system.

The risk associated with information systems is assessed as substantial. A database supported with excel worksheets will be relied upon until ERP becomes functional.

Strengths and Weaknesses

One significant strength of the project is that it will be implemented by TCDD and a PIU is dedicated to the project implementation within the institution.

The weaknesses in the project are as follows:

There are no IFRS financial statements audited in accordance with ISA available for TCDD. TCDD however is subject to YDK audit, which is more of compliance audit then financial audit. The YDK report for the year ended December 31, 2003 is reviewed and there were no major issues relating to internal controls except for the lack of an integrated system. In order to improve the financial management controls at TCDD, the company will engage consultants for carrying out a detailed review of internal controls which will identify gaps and weaknesses in internal control framework. The Bank, through supervision missions, will monitor implementation of the action plan to strengthen the internal controls in TCDD. YDK will be relied upon to be the external auditor of the company in the first two years. After the action plan is implemented, TCDD will hire the services of an international auditor to carry out the audits of its IFRS financial statements in accordance with ISA.

The current accounting system of TCDD is not an integrated system and financial statements are generated manually in excel. TCDD is currently updating its system but the CRPP is not expected to become functional before December 2007.

TCDD has an investigation department in place. However the Company does not have an Internal Control Department. The enacted Public Financial Management and Control Law require internal control departments to be established at Government institutions. TCDD does not fall within the scope of these articles of PFMC. However it is still important that TCDD considers the establishment of a modern Internal Control Department in line with the developments in the Country.

It is concluded that the financial management environment of TCDD includes many deficiencies and TCDD should take immediate action to address these deficiencies. Temporary arrangements will be relied upon for project accounting and reporting purposes but ultimately when TCDD has sound financial management environment reliance will be placed on the Company systems for project accounting and reporting procedures. Following action plan is proposed to address the deficiencies in the TCDD financial management environment:

Action	*Responsible Person*	*Completion Date*
1. TCDD prepares an acceptable TOR for the internal control risk assessment	TCDD Management	June 30, 2005
2. Appoint an acceptable firm to conduct the internal control risk assessment	TCDD Management	October 31, 2005
3. ERP is installed and functional at TCDD	TCDD	December 31, 2007

Supervision Plan

The frequency of supervision would be dependent on the Project's risk rating. However, during the initial stage of the project, considering the reliance on TCDD's system for project accounting and reporting, intense supervision efforts would be ensured. During supervision missions, project's financial management and disbursement arrangements (including a review of a sample of SOEs and movements on the Special Account) would be reviewed to ensure compliance with the Bank's minimum fiduciary requirements.

The Country FMS would review the FMRs for the project on a regular basis and the results and/or issues would be followed up during the supervision missions. The Audited Project Financial Statements would be reviewed and identified issues would be followed up with the PIU.

External Audit

TCDD financial statements are audited annually by the High Audit Board (YDK), which functions under the Prime Ministry. As per provisions of the PFMC Law, YDK will soon merge with the Turkish Court of Accounts (TCA), the Supreme Audit Institution (SAI) of the country. The YDK audit reports are submitted to the SOE commission of the Parliament.

YDK audit report for the year ended December 31, 2003 includes the following comments relating to financial management:

> *The auditors recommended establishment of an integrated accounting system that will enable the head office to monitor cash and inventories in the branches and to have a more reliable and detailed cost accounting module.*
>
> *The auditors recommended restructuring the accounting procedures of TCDD in accordance with uniform chart of accounts as published by the Ministry of Finance and EU "acquis communautaires".*

TCDD in order to address these recommendations, decided to implement an Enterprise Resource Planning Program.

The borrower for the loan will be the Treasury, however its implementation will be done by TCDD, and since TCDD is a revenue earning entity under the Bank policies it is required to submit audited financial statements to the Bank over the life of the project. However also as analyzed by YDK auditors, the financial management systems and procedures in TCDD need to be upgraded. TCDD does not have the capacity to prepare financial statements in accordance with International Financial Reporting Standards and therefore a regular audit that is typically conducted on the IFRS financial statements of entities in accordance with ISA, is in all probability going to result in a disclaimer opinion.

In order to support the establishment of a sound financial management environment in TCDD, during the first year of the project -- instead of requiring IFRS audit of TCDD financial statements, -- TCDD will be asked to engage an acceptable firm to carry out a detailed assessment of internal controls in the company covering various business system and regional offices. The outcome of this assignment would be an action plan for strengthening the internal controls in TCDD. In the second year TCDD will work on the implementation of the action plan. During these first two years, the Bank will accept the YDK audit report, for the purposes of complying with the external audit requirements for revenue earning entities.

Starting from the third year of the project annual financial statements of TCDD will be audited by independent auditors following International Standards on Auditing (ISA) and under ToR acceptable to the Bank. Since the ERP implementation is expected to be completed by that time, TCDD will be in a position to prepare consolidated financial statements that can then be audited by an independent auditor.

The project financial statements will be audited by the Treasury Controllers in accordance with International Standards on Auditing (ISA) and under TOR that is agreed with the Bank.

The risk associated with external audit is assessed as substantial. There are no audited financial statements available for TCDD prepared in accordance with IFRS and ISA. However TCDD will implement an action plan to improve its financial management environment and aim for a qualified or unqualified audit opinion.

Disbursements

The Borrower through TCDD has agreed for this project to finance expenditure using the traditional methods of disbursement. While there is also a requirement for the preparation and submission of quarterly FMRs, these will not be used as basis for disbursements but for monitoring and evaluation purposes. Proceeds of the loan will be allocated as follows:

TURKEY Railway Restructuring Project **Expenditure Accounts by Financiers** (US$ Million)	**The Government**		**International Bank for Reconstruction and Development**		**Total**		**International Bank for Reconstruction and Development**	
	Amount	**%**	**Amount**	**%**	**Amount**	**%**	**Euros**	**US$**
I. Investment Costs								
A. Civil Works (incl. Supply & Installation)	20.0	15.0	113.1	85.0	**133.1**	59.6	**88.0**	113.1
B. Goods and equipment	0.0	15.0	0.1	85.0	**0.2**	0.1	**0.1**	0.1
C. Staff Adjustment	16.3	20.0	65.6	80.0	**81.9**	36.9	**51.0**	65.6
D. Consulting services and training	-	-	5.1	100.0	**5.1**	2.8	**4.0**	5.1
E. Project Implementation costs	-	-	0.8	100.0	**0.8**	0.3	**0.6**	0.8
	36.3	16.4	184.7	83.6	**221.0**	100.0	**143.7**	184.7
Total PROJECT COSTS								

Special Account

To facilitate timely disbursement against eligible expenditure for the project, a Special Account will be opened in the Central Bank to be managed and operated by the PIU. The internal control procedure for the operation of the Special Account is outlined in the financial manual. The account will be denominated in *Euros* with an authorized allocation of €14 million except that this will be limited to €7 million at the start-up of the project until such time as total disbursements including special commitments under the loan reach €25 million. The account will be reconciled on a monthly basis and all supporting documentation will be retained by the project and made available for audit purposes and Bank supervision missions. The procurement plan features several high value contracts; direct payments will be used as is necessary.

Use of Statement of Expenditure (SOE)

Requests for disbursements can be made using the SOE procedures for payments against contracts not subject to the Bank's prior review as follows: (a) all *contracts for works* valued at $5,000,000 equivalent, (b) contracts for goods, (c) contracts for the services of consulting firms valued at $200,000 equivalent and for individual consultants valued at $50,000, (d) training (e) incremental operating costs; and (f) severance payments. For expenditure not reported on the SOE basis, the project will submit summary of expenditure reports supported by necessary documentation (contracts, invoices, receipts, etc). With regards to expenditure for severance payments, the eligibility criteria for these are provided in the operational manual and all documentation will be retained at the PIU and made available for post review.

Annex 8: Procurement

TURKEY: RAILWAYS RESTRUCTURING

A. General

Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Loan, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower through TCDD and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

B. Procurement of Works including Supply and Installation Contracts

This project has two Supply and Installation (S&I) contracts. One large (US$132.4 million) ICB, Supply and Installation (S&I) contract for signalization of the selected routes and station loops extensions subject to prequalification and the other ICB/S&I contract for Tunnel mechanical ventilation. The procurement for Supply and Installation contracts will be done using the Bank's Standard Bidding Documents (SBD). The preceding large S&I contract will be conducted with prequalification of bidders by using the Bank's Standard Prequalification and Bidding Documents.

The project has two NCB Works contracts. The procurement of works will be done by using the Bank's Standard Bidding Documents (SBD) for all ICB Works, and by using the Bank's sample NCB documents for ECA Region for Works. The works contracts to cost less than USD 5 million may be awarded through NCB. Any ambiguity regarding predominance of the Bank's procurement rules in the case of contracts conducted in NCB procedures will be overcome by using the Bank's sample NCB documents for ECA Region for Works. The conditions for using NCB are listed below from paragraph A to K below shall be discussed at the negotiations and made part of the Loan Agreement. Based on the performance of the project implementation unit (PIU) on the NCB contracts, the Bank will consider increasing the NCB Works threshold per contract to USD 6 million or above after one year of implementation pursuant to effectiveness of the Loan Agreement.

A. Eligibility

Bidding shall not be restricted to domestic bidders. No restriction shall be applied to foreign bidders who wish to submit a bid.

B. Procedures

Invitations to bid shall be advertised in the Official Gazette and in at least one widely circulated national daily newspaper or in an electronic portal of free access allowing a minimum of 30 days for the preparation and submission of bids.

C. Assessment of the Bidder's Qualifications

In the procurement of goods and works, where pre-qualification is not used, the qualifications of the bidder who is recommended for award of contract shall be assessed by post-qualification, applying minimum experience, technical and financial requirements which shall be explicitly stated in the bidding documents and which shall be determined by a 'pass/fail' method, not through use of a merit point system.

D. Participation by Government-owned Enterprises

Government-owned enterprises in the Republic of Turkey shall be eligible to participate in bidding only if they can establish that they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the Government. Furthermore, they will be subject to the same bid and performance security requirements as other bidders.

E. Participation by Joint Ventures

Participation shall be allowed from joint ventures on the condition that such joint venture partners will be jointly and severally liable under the Contract.

F. Bidding Documents

Procuring entities shall use the Bank's sample NCB documents for ECA Region for Works and Goods and shall draft contract and conditions of contract acceptable to the Bank.

G. Bid Evaluation

a) Evaluation of bids shall be made in strict adherence to the monetarily quantifiable criteria declared in the bidding documents and a merit point system shall not be used.

b) Extension of bid validity shall be allowed once only for not more than 30 days. No further extensions should be requested without the prior approval of the Bank

c) Contracts shall be awarded to qualified bidders having submitted the lowest evaluated substantially responsive bid.

d) No domestic preference shall apply under National Competitive Bidding.

H. Price Adjustment

Civil works contracts of long duration (e.g. more than eighteen (18) months) shall contain an appropriate price adjustment clause.

I. Rejection of All Bids

All bids shall not be rejected and new bids solicited without the Bank's prior written concurrence.

J. Contracts

All contracts shall be in writing, signed and stamped by authorized signatories of the Purchaser and the Supplier and contain identical terms and conditions of contract to those included in the tender documents.

K. Securities

Bid Securities should not exceed 3 % (three percent) of the estimated cost of the contract; Performance Securities not more than 10 % (ten percent). No advance payments shall be made to Contractors without a suitable Advance Payment security. The wording of all such securities shall be included into the bidding documents and shall be acceptable to the Bank

C. Procurement of Goods

Goods procured under this project would include equipment for railways and tunnel rehabilitation on the selected routes and also minor goods such as office hardware, software, and office equipment/furniture for the project coordination unit.

D. Selection of Consultants

TCDD will select and hire consultants for the preparation of bidding documents including the detailed design drawings, technical specifications and bills of quantities and for the construction supervision assistance for the two major Supply and Installation contracts for signalization of the selected routes and other works contracts.

TCDD will also select and hire consultants to provide institution building support and technical assistance to TCDD on various aspects related to improving efficiency and restructuring of the institution.

Consultant services also comprise the TA to support implementation of the project, training and seminars, financial management assistance and project financial audits.

E. Assessment of the Agency's Capacity to Implement Procurement

Procurement activities will be carried out by the PIU to be established in the General Directorate of Railways (TCDD). An assessment of the capacity of the TCDD to implement procurement actions for the project has been carried out by Ibrahim Sirer (ECSPS) in June, 2004. The assessment reviewed the organizational structure for implementing the project.

The key issues and risks concerning procurement for implementation of the project have been identified and include lack of experience with the Bank-financed projects. It was agreed that the procurement specialists and selected technical staff to be assigned by the TCDD for this project are sent to English language training to improve their language skills through the proceeds of the PHRD Grant (TFO53200) and then sent for training organized preferably by ILO at Turin /Italy, according to their needs for further development of procurement knowledge and qualifications. A local procurement consultant will be hired to support the TCDD procurement staff to be assigned for this project. The initial overall project risk for procurement is high. The risk rating will be re-evaluated after one year of Loan effectiveness and adjustment made accordingly.

During the project launch workshop the Bank will organize a training program to the TCDD personnel who may be involved in the procurement activities to introduce the Bank's Guidelines and standard bidding documents to be used in the implementation of the project.

F. Procurement Plan

The Borrower through TCDD, at appraisal, developed a procurement plan for project implementation which provides the basis for the procurement methods. This plan has been agreed between the Borrower and the Project Team on May 6, 2005 and is summarized in Section H. Among the other procurement items, it consists of ICB contracts amounting US$132,6 million, and QCBS consulting services contracts estimated to cost US$ 3,8 million. The Procurement Plan will be updated in agreement with the Project Team bi-annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

G. Frequency of Procurement Supervision

Contracts not subject to Bank's prior review will be post reviewed by Bank's supervision missions and/or during regular post-reviews by PAS on sampling basis, i.e,. one out of every five contracts. The frequency of procurement supervision should be every six months.

H. Details of the Procurement Arrangements Involving International Competition

1. Goods, Works, and Non Consulting Services

(a) List of contract packages to be procured following ICB and direct contracting:

1	2	3	4	5	6	7
Ref No.	**Contract (Description)**	**Estimated Cost**	**Procure ment Method**	**P-Q**	**Domestic Preference (yes/no)**	**Review by Bank (Prior / Post)**
1	Mersin-Toprakkale & Yenice-Boğazköprü signaling and station loop extension	132,400,000	ICB	Pre-Q	No	Prior
2	Tunnel mechanical ventilation	200,000	ICB	Post-Q	No	Prior

(b) All ICB contracts for Works, Supply and Installation and Goods and first NCB works, and Goods contracts, first Shopping Contract and all direct contracting will be subject to prior review by the Bank.

2. Consulting Services

(a) List of consulting assignments with short-list of international firms.

1	2	3	4	5
Ref No.	**Description of Assignment**	**Estimated Cost**	**Selection Method**	**Review by Bank (Prior / Post)**
1	Construction Supervision of Mersin-Toprakkale & Yenice Bogazkopru signaling and station loop extensions	1,000,000	QCBS	Prior
2	TCDD operations safety audit and preparation of action plan	400,000	QCBS	Prior
3	Rationalization and PSO for passenger services	400,000	QCBS	Prior
4	Rail border crossing trade facilitation on strategic corridors	500,000	QCBS	Prior
5	Consulting services for preparation APL2	500,000	QCBS	Prior
6	Support for the implementation of TCDD restructuring	1,000,000	QCBS	Prior

(b) Consultancy services by firms estimated to cost US$200,000 or more per contract, individual consultant contracts estimated to cost US$ 50,000 or more and single source selection of consultants will be subject to prior review by the Bank.

(c) Short lists composed entirely of national consultants: Short lists of consultants for services estimated to cost less than US$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

The following table provides the details of the agreed project procurement plan.

PROCUREMENT PLAN FOR RAILWAYS RESTRUCTURING PROJECT as of May 6, 2005

1	2	3	4	5			6	7	8	9	10
Ref. No.	Description	Type	No. of packages	Estimated Cost (USD Million)			Proc. Method	Prequalif. (yes/no)	Review by Bank Prior/Post	Expected Bid-Open. Date/proposal submission date	Comments
				Total	BF	NBF					
	GOODS										
1	Equipment for railways rehabilitation		Multiple	0.2			Shopping		Post review [1)]		
	Goods Sub-Total			0.2							
	WORKS/SUPPLY & INSTALLATION										
1	Rail linkage container terminal in Mersin Port	W	1	0.2			NCB		Post review [1)]		
2	Rail linkage for oil products in Mersin Port	W	1	0.3			NCB		Post review [1)]		
3	Tunnel mechanical ventilation	SI	1	0.2			ICB		Prior Review		
4	Mersin-Toprakkale and Yenice-Bogazkopru signaling and station loop extension	SI	1	132.4			ICB		Prior Review		
	Works Sub-Total			133.1							
	CONSULTANT SERVICES										
1	Construction Supervision of Mersin-Toprakkale and Yenice-Bogazkopru signaling and station loop extension	CS	1	1			QCBS		Prior Review		
2	Construction Supervision of Rail linkage container terminal in Mersin Port	CS	1	0.1			Individual		Post review [2)]		
3	Construction Supervision of Rail linkage for oil products in Mersin Port	CS	Multiple	0.1			Individual		Post review [2)]		
4	Construction Supervision of Tunnel mechanical ventilation	CS	Multiple	0.1			Individual		Post review [2)]		
5	TCDD operations safety audit and preparation of action plan	CS	1	0.4			QCBS		Prior Review		
6	Market studies for freight services incl. Container and petroleum products	CS	Multiple	0.4			CQ		Post review [1)]		
7	Rationalization and PSO for passenger services	CS	1	0.4			QCBS		Prior Review		
8	Rail border crossing trade facilitation on strategic corridors	CS	Multiple	0.5			QCBS		Prior Review		
9	Consulting services for preparation APL2	CS	Multiple	0.5			QCBS		Prior Review		
10S	upport for the implementation of TCDD restructuring	CS	Multiple	1			QCBS		Prior Review		
11F	inancial Audits of the TCDD	CS	1	0.15			LCS		Post review [1)]		
12I	nternal Control risk assesment of TCDD	CS	1	0.05			LCS		Post review [1)]		
13P	ublic communication and surveys	CS	1	0.2			CQ		Post review [1)]		
	Consultant Sub-Total			4.9							
	TRAINING										
1	Railway procedures review and design			0.2					Other		
2	Elaboration of Training Program			0.2					Other		
3	Identification of labor needs			0.2					Other		
	Tranining Sub-Total			0.6							
	PROJECT IMPLEMENTATION COST										
	PCU Incremental Operating Costs including PCU staff salaries (excluding government employees) and staff per diems and lodging as well as travel costs for field trips related to the implementation of the project, supplies, M&O costs.										
	Project Implementation Sub-Total			0.7							
	TOTAL			139.5							

1) The first contract is subject to prior review

2) Each contract exceeding the threshold of USD 50,000 subject to prior review

3) Expenditures under this package will be reimbursed based on the detailed budget prepared by the PCU and pre-authorized by the Bank annually

a) All ICB contracts for works and goods and first NCB works, and goods contracts, first Shopping Contracts and all direct contracting will be subject to prior review by the Bank.

b) The works contracts to cost less than USD 5 million each may be awarded through NCB. The scheduled NCB-Works contracts in the procurement plan has an estimated aggregate of USD900,000. Bank's sample NCB documents for ECA Region for Works will be used. The conditions for using NCB are listed in Schedule 4 to the Loan Agreement

c) Consultancy services by firms estimated to cost US$200,000 or more per contract, individual consultant contracts estimated to cost US$50,000 or more and single source selection of consultants will be subject to prior review by the Bank.

d) Short lists composed entirely of national consultants: Short lists of consultants for services estimated to cost less than US$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Annex 9: Economic and Financial Analysis

TURKEY: RAILWAYS RESTRUCTURING

This annex presents the economic and financial analysis of the project. It comprises three main sections: the economic analysis, including the sensitivity analysis, of the proposed project components, and the financial analysis of TCDD and the impact of the project on financial sustainability; and the formal risk analysis of the proposed project.

1. The Economic Analysis

The economic analysis of the project has been undertaken on those components which have been defined for inclusion in the first tranche of the APL (as defined in Annex 4 of this document) and include the following:

1. ***Component A: The Mersin-Toprakkale, Boğazköprü-Ulukisla, and Ulukisla- Yenice line sections***:. This component includes the signaling of the Mersin-Toprakkale (146km) and Boğazköprü – Ulukisla (176km) and Ulukisla – Yenice (109km) line sections. It also includes complementary works for the extension to 750 meters of the passing loops within stations, mechanical ventilation of two long tunnels (PK299 and PK303), installation of optic fiber along the lines for improved communication, CTC centralization, improved railway interface at both the container terminal and the free zone within the port of Mersin, and rehabilitation of the oil charging facility.

2. ***Component B: Staff adjustment and social plan***: The second main component relates to the implementation of a labor restructuring plan within TCDD. A phased labor reduction and social mitigation plan has been developed and is described in Annex 4. The economic analysis of this component has been undertaken and is reported separately in a subsequent section.

Actual and Potential Traffic

Table 1 presents data illustrating the trend in freight traffic in gross ton-km on the three line sections in component A over the period 1993-2003:

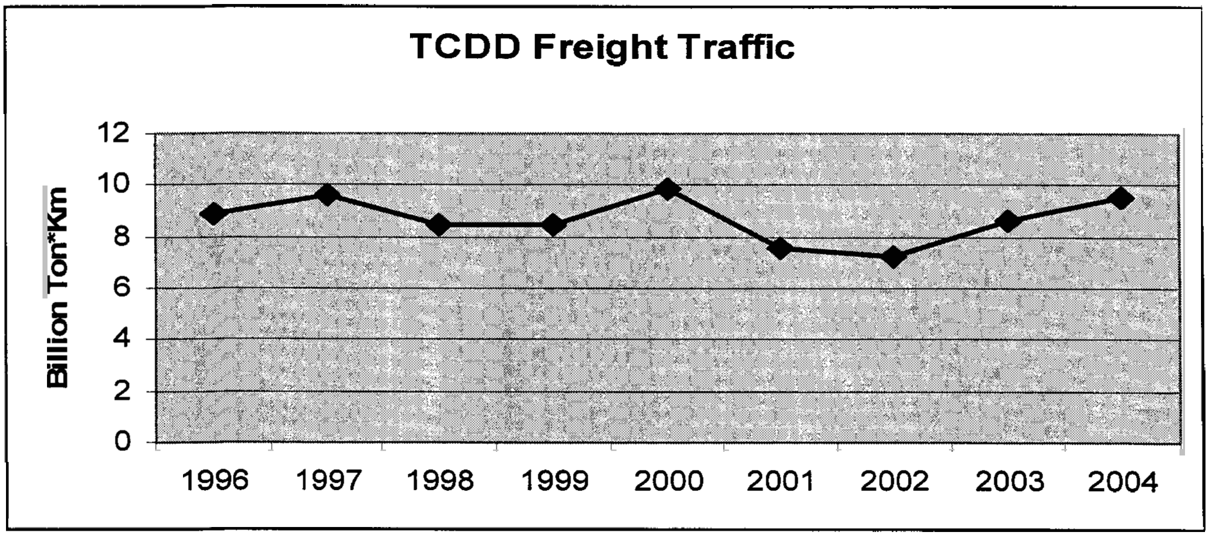
Table 1: Total Freight Transportation by Line Sections Thousands

Years	Bogazköprü-Ulukışla	Ulukışla-Yenice	Mersin-Toprakkale	Total Grosstonne-km	Annual % Change
1993	649,125	607,526	554,665	1,811,316	
1994	705,282	667,429	613,206	1,985,917	9.64%
1995	779,230	696,020	653,048	2,128,298	7.17%
1996	820,971	722,159	656,787	2,199,917	3.37%
1997	881,774	736,515	703,381	2,321,670	5.53%
1998	909,127	740,120	675,845	2,325,092	0.15%
1999	978,901	978,901	730,839	2,688,641	15.64%
2000	1,032,767	1,032,767	755,987	2,821,521	4.94%
2001	1,086,633	1,086,633	781,134	2,954,400	4.71%
2002	943,950	1,140,500	806,281	2,890,731	-2.16%
2003	1,194,366	1,194,300	831,429	3,220,095	11.39%

Source: TCDD (2005) *Boğazköprü – Ulukışla-Yenice, Mersin – Adana – Toprakkale Signalling, Telecommunication and Station Extension Project* - Feasibility Study

The table illustrates that freight traffic volume has been volatile over this period, with the annual growth in freight volume, in terms of grosstonne-km varying from an increase of 15.6% in 1999, to a decline of just over 2% in 2002. Figure 1, reproduced from TCDD's Annual Business Plan for 2005-2010, illustrates this volatility in total freight carried in billion ton-km over the period 1996-2003.

Figure 1: Total Freight Carried by TCDD (Billion Ton-km) 1996-2004



Source: TCDD Annual Business Plan 2005-2010.

This volatility reflects the macroeconomic instability over the same period, characterized by chronically high inflation and sharp swings in the business cycle[17]. This is evidenced by the significant changes in GDP growth (at market prices) over the period 1996-2002, which varied from 7.5% growth in 1997, to a decline of 4.7% in 1999, to an increase of 7.4% in 2000, followed by a further decline of 7.5% in 2001[18]. The average annual growth in GDP (at market prices) over the period 1996-2002 is estimated at 2.9% per annum

The average growth in total freight volume carried by TCDD over the period 1996-2002 was 3.4% per annum, which implies an income elasticity of approximately 1.2. This suggests that for every 1% increase in GDP there will be a 1.2% increase in freight volume on rail. However, the average growth on the three line sections of interest over the period 1993-2003 was 6.4% per annum, which is almost twice the expected growth, predicating the estimated relationship between GDP growth and rail freight volume. Even over the shorter period, 1996-2002, the average annual growth in freight traffic on the three line sections of interest is still 4.8% per annum.

This higher growth can be explained, at least partially, by the growth in the Çukurova region, which represents the immediate hinterland to these three line sections. This region has experienced above average economic and population growth, with Adana and Mersin now having an aggregate population of nearly 4 million inhabitants. The region is also important for agricultural production (fruit, vegetable,

[17] See World Bank (2003) Turkey Country Economic Memorandum, Volume 1, for more detail.
[18] World Bank (2003) Turkey CEM, Volume 3 Statistical Appendix, Table 1.

citrus fruits, cotton production), industrial production (steel, oil products, natural gas, cement, soda, and paper), and the textile and tourism sectors[19]. The opening of the Baku-Ceyhan oil pipeline, the Mersin Free Area, and the further development of Mersin Harbor, are all likely to contribute to above trend growth in the regional economy[20].

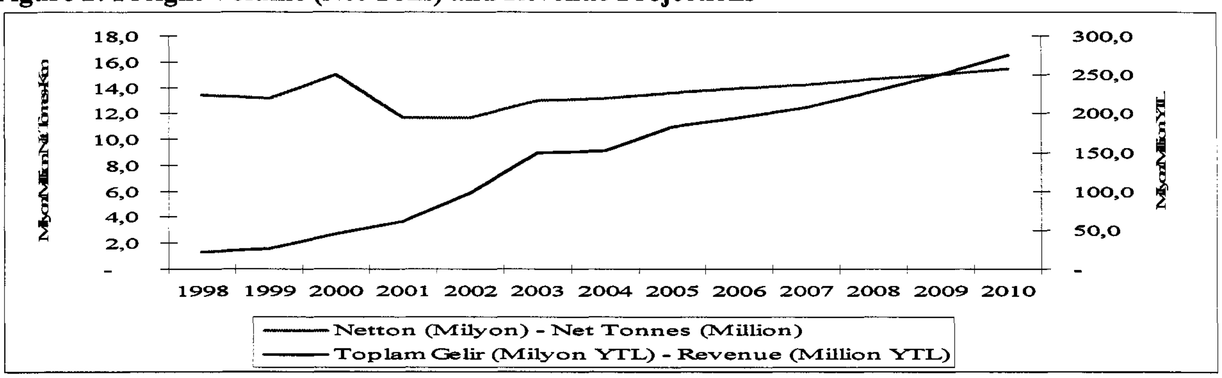
Table 2 indicates the forecast growth of rail freight on the three line sections over the period of the project. The assumed increases reflect that the forecast growth of GDP at a national level is 5% per annum, on average, over the period 2005-2006[21], before declining slightly in subsequent years. Thus, given the estimated income elasticity above, a conservative estimate is that rail freight volume will grow by a similar amount, up to 2014, when it is assumed to decline to 4% per annum until the end of the appraisal period. The expectation of above trend growth in the regional economy would support both these forecasts, and the assertion of conservatism.

Table 2 : Assumed Growth Rates (%) in Total Traffic by Line Section

Line Section	2004-2014	2014-2034
Bogazköprü-Ulukışla	5%	4%
Ulukışla-Yenice	5%	4%
Mersin-Toprakkale	5%	4%

However, these rates are unlikely to be realized by relying on current markets alone, something TCDD recognizes explicitly in its recent Annual Business Plan[22], which acknowledges that the growth rates of certain segments of the market is likely to slow, namely ores, clinker, cement and steel products. But the expectation is growth will increase in other market segments, such as container traffic, international traffic to and from the Middle Eastern States, and the movement of oil products following the opening of the Baku-Ceyhan Pipeline. TCDD estimates that the range of growth rates of the different market segments will be 2%-7% per annum. In addition, the further introduction of successful service enhancements such as block trains is also expected to have a positive impact on total freight volume. Figure 2, reproduced from the TCDD Annual Business Plan, indicates the estimated growth in freight volume, in net tons, and revenues from freight traffic to 2010.

Figure 2: Freight Volume (Net Tons) and Revenue Projections



Source: TCDD Annual Business Plan 2005-2010.

[19] TCDD (2005) Boğazköprü – Ulukışla-Yenice, Mersin – Adana – Toprakkale Signalling, Telecommunication and Station Extension Project - Feasibility Study.

[20] Further detail about the economic development potential of the hinterland of the three line sections is contained in TCDD (2005) *Boğazköprü – Ulukışla-Yenice, Mersin – Adana – Toprakkale Signalling, Telecommunication and Station Extension Project* - Feasibility Study.

[21] EIU (2005) *Country Report – Turkey*

[22] TCDD (2005) *Annual Business Plan for 2005-2010.*

The Economic Appraisal of Component A

Component A: The Mersin-Toprakkale, Boğazköprü-Ulukisla, and Ulukisla- Yenice line sections. The economic analysis of component A was estimated by the use of a stylized model that considered the actual and forecast freight traffic on the three line sections, and the impact of the proposed investments on available line capacity in a defined 'do-nothing' scenario and a defined 'do-something' scenario. The economic costs were defined as the prospective investment costs of TL 206.66 million (presented in December 2004 prices), together with the costs of actually operating each train. A stylized assumption was made that the maintenance costs of the track would be the same in both scenarios. This is acknowledged to be something of a simplification, but current costing methods in TCDD precluded an accurate assessment of the incremental marginal costs of the heavier and longer trains in the 'do-something scenario'.

The economic benefits (also presented in December 2004 prices) were defined as the additional revenue that will be realized from additional traffic that can be carried on these line sections, following the increase in capacity, in the defined 'do-something' scenario *vis-à-vis* the defined 'do-nothing' scenario of no capacity enhancements, where a capacity constraint was estimated to restrict future growth in traffic and revenue in 2004, 2007 and 2011, respectively, on the three line sections. The capacity of the line sections in both of the scenarios has been calculated by considering the required travel time through the longest single line section, together with a line and station safety margin. Table 3 presents the estimated capacity of the three line sections in both the 'do-nothing' and 'do-something' scenarios:

Table 3 – Estimated Capacity of Line Sections

LINE SECTIONS	'do-nothing scenario' (Train / day)	'do-something scenario' (Train / day)
Boğazköprü – Ulukışla	23	30
Ulukışla - Yenice	29	32
Mersin – Adana - Toprakkale	43	182

Source: TCDD (2005) Boğazköprü – Ulukışla-Yenice, Mersin – Adana – Toprakkale Signalling, Telecommunication and Station Extension Project - Feasibility Study

The required implementation, or construction, period has been assumed to be four years (2004-2008), with a subsequent appraisal period of 25 years (2008-2033). The latter period was defined after consideration of the operational life of the proposed investments. All costs and benefits presented in December 2004 prices and discounted back to present value terms using a discount rate of 12%. Appropriate sensitivity analysis has been undertaken to test variation in the key parameters of interest in the project, including the discount rate, and the results are reported in the subsequent section.

The results of the economic analysis, in terms of the Net Present Value (NPV), the Economic Internal Rate of Return, (EIRR) and the Benefit Cost Ratio (B/CR) for Component A are presented in Table 4.

Table 4 – Economic Appraisal of the Project

	Component A
Net Present Value @12% (Mill TL)	44.6
EIRR in %	15
B/C ratio	1.29

The economic analysis indicates that component A is economically viable, returning a positive NPV of TL 44.6 Million, following an investment of TL 206.66 million. The Economic Internal Rate of Return is

15%, and the estimated benefit-cost ratio is 1.29, which since it is greater than one, would support a decision to invest in the project.

Since, all three line sections also carry passenger trains, and whilst the introduction of the improved signaling is likely to result in a reduction of the variability in journey times for these trains, these benefits have not been considered in the economic appraisal. This would support the assertion that the estimated benefits represented a conservative estimate of the total benefits resulting from the investment.

Sensitivity and Switching Analysis

This section indicates the impact of uncertainty or variation in the key parameters of interest on the economic appraisal of the different components in the project. In the case of component A, the key parameters are perceived to be the growth rate of future traffic, the investment costs, and the discount rate. The impact of defined variation in these parameters is presented in the following table, together with the percentage change in the former necessary to make the project unviable, the switching values.

Table 5 – Sensitivity Analysis of Component A

Capital Costs	**-20%**	**Base Case**	**+20%**
NPV (Mill TL)	68.4	44.6	6.5
EIRR (%)	17%	15%	12%
Traffic Growth	**-20%**	**Base Case**	**+20%**
NPV (Mill TL)	3.4	44.6	74.1
EIRR (%)	12%	15%	16%
Discount Rate	**8%**	**10%**	**12%**
NPV (Mill TL)	153.5	83.5	44.6
B/C Ratio	2.8	1.58	1.29

	Estimated Switching Values
Increase in capital costs	20%
Reduction in traffic growth	20%

The table reveals that component A is relatively robust to the defined variation in the key parameters of interest, with significant changes in the both the capital costs of the project and the forecast growth rates, still resulting in a positive NPV and an EIRR at the 12% threshold. The sensitivity analysis also revealed the estimated switching values, with capital costs needing to increase by in excess of 20% and or traffic growth falling short of the forecast by more than a similar amount before the project became unviable.

2. Financial Analysis

The financial benefits will be derived from: (i) the additional revenue that will be realized from additional freight traffic that can be carried as a result of investments for capacity improvements on the Mersin-Toprakkale, Boğazköprü-Ulukisla, and Ulukisla- Yenice line sections; and (ii) the reduction in labor cost.

Table 6: Financial Appraisal of the Project

NPV and FRR										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Costs (US$ m)										
Project investment and accrued liabilities for retirement benefits	84	91	94	86	82	14	8			
Benefits (US$ m)										
Incremental revenue						3	6	8	8	14
Saving in operating cost		60	100	137	171	202	202	202	202	202
Net benefits (US$ m)	(84)	(31)	6	51	89	191	200	210	210	216
NPV (US$ m)	$405									
Financial IRR	50%									

The financial analysis indicates that the project is financially viable, returning a very high net present value (NPV) of US$405 million at a discount rate of 12%, following an investment of US$129 million for capacity improvements on the above three line sections, $93 million for compensation incentives, as well as US$238 million of structural cost of retirement benefits, which is an accrued liability. Total labor cost savings during 2005-2009 alone amount to US$671 million, more than twice the total cost of retrenchment and more than 7 times the cost of the compensation incentives. The financial internal rate of return is 50%.

Transport demand in Turkey has grown at an annual rate of about 8% since 1950. Yet demand for rail transport has gradually declined and the market share of rail transport fell from 55% in 1950 to 9% in 1980, and declined even further to 3% in 2002. Between 1980 and 2002, passenger and freight transport volume has almost tripled and quadrupled respectively. During the same period, demand for road transport has grown, and by 2002, road transport represented 96% of passenger transport and 92% of freight transport. The rail transport represents only a mere 2% of passenger-km and 4% of freight ton-km.

The sharp decline of rail transport, particularly the loss of freight traffic contributed to the deterioration of TCDD's operational and financial performance. TCDD has significantly reduced its freight tariffs, but this has not helped TCDD to attract freight traffic. Losses of TCDD have grown because of declining traffic as well as low profitability from overstaffing, old facilities and equipment, growing competition, and excessively large size of network relative to demand. Total route network is 10,948 km, consisting of 8,671 km of main lines serving major cities in Turkey, and 2,277 km of secondary lines. Most TCDD railway lines are loss making. TCDD's financial position has now reached unsustainable levels with heavy losses and growing debts. Yet TCDD has not done much to reduce its cost structure.

The railway related activities are the main element of TCDD, representing about 90% of TCDD's total costs, but generating only 55% of its revenue. Although port related activities are profitable and cross subsidizing railways, the operating revenue of TCDD is not sufficient even to cover the cost of its staff. TCDD is compensated for the operation of the least profitable lines totaling about one fourth of the network, as well as several loss making express trains and Lake Van train ferry. TCDD also receives subsidies for track maintenance activities, typically for renewal costs. These subsidies are part of the national budget. Part of deficit has been also covered by equity injection of the Treasury in the form of capital increase. The capital contribution is earmarked specifically to cover the labor cost of the railways, as imposed by the Railway Law. This has not motivated TCDD to reduce the excess staff. TCDD rarely receives all that it requests and its uncovered deficit was covered by accumulating arrears in employee taxes and social contributions. During the period 1993-2004, the railway cost the Government about US$9 billion, averaging about US$750 million per year, or 0.2% of GDP.

Although the financial deficit is very large in absolute terms, its value expressed as a share of GDP compares well with Croatia (1.3% of GDP), Romania (0.7%) and Bulgaria (0.6%), and fairly with Poland (0.4%). All railway systems in Western Europe receive substantial financial support[23] by one mechanism or another from governments to sustain their respective railway network. In U.K., with a similar length of network, the Government spent around US$2.7 billion (0.2% of GDP) on the railways; US$8.5 billion (0.5%) in Germany; US$6.2 billion (0.5%) in France; US$2.3 billion (0.6%) in Netherlands; US$580 million (0.3%) in Austria; and US$560 million (0.5%) in Greece.

Table 1: TCDD Operational and Financial Performance
(amount in US$ million, unless noted otherwise)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	1993-2004 % change
FEX (US$ = TL)	11,216	30,263	46,559	83,044	155,504	264,183	426,619	628,802	1,245,610	1,517,018	1,493,829	1,493,829	
Passenger-Km (billion)	7.1	6.3	5.8	5.2	5.8	6.2	6.1	5.8	5.6	5.2	5.9	5.3	-26%
Ton-Km (billion)	8.5	8.3	8.6	9.0	9.7	8.5	8.4	9.9	7.6	7.2	8.7	9.6	12%
Total Traffic Unit: (pkm+tkm) (billion)	15.7	14.7	14.4	14.2	15.6	14.6	14.6	15.7	13.1	12.4	14.5	14.9	-5%
Number of employees (year-end)	42,687	39,943	38,754	37,584	36,278	36,355	36,915	35,530	34,140	32,007	29,637	29,050	-32%
Labor productivity (thousand TU per employee)	367	355	367	373	421	403	398	434	377	376	472	507	38%
Rail Revenue	236	161	173	183	202	219	239	246	162	193	304	372	58%
Rail Costs	1161	1079	1073	1024	1033	956	916	988	857	812	943	1250	8%
Deficit	**(926)**	**(918)**	**(900)**	**(841)**	**(831)**	**(737)**	**(678)**	**(742)**	**(695)**	**(618)**	**(640)**	**(878)**	-5%
Ports Profit	**(31)**	**(13)**	**(9)**	**21**	**66**	**116**	**41**	**82**	**77**	**87**	**85**	**95**	
TCDD deficit	**(957)**	**(931)**	**(909)**	**(820)**	**(765)**	**(622)**	**(637)**	**(660)**	**(617)**	**(531)**	**(555)**	**(783)**	-18%
State budget support, of which:	**168**	**89**	**93**	**88**	**97**	**103**	**119**	**137**	**159**	**181**	**221**	**274**	63%
Infrastructure maintenance	30	12	11	10	9	11	12	13	82	89	118	140	368%
Uneconomic lines	104	55	60	57	65	65	77	90	53	63	72	96	-7%
Uneconomic express lines	26	18	18	18	19	23	27	28	20	24	25	27	6%
Lake van	9	5	4	3	4	3	4	6	4	5	7	10	17%
Net deficit, incl. effect of state budget support	**(789)**	**(842)**	**(816)**	**(732)**	**(668)**	**(519)**	**(517)**	**(523)**	**(459)**	**(351)**	**(333)**	**(509)**	-36%
Working ratio (without port and subsidy) 1/	367%	390%	351%	332%	314%	323%	379%	385%	366%	366%	353%	366%	0%
Working ratio (with port and without subsidy) 2/	251%	220%	201%	180%	169%	164%	202%	213%	193%	196%	181%	207%	-18%
Working ratio (with port and subsidy) 3/	170%	161%	151%	141%	134%	130%	149%	155%	124%	127%	120%	132%	-22%
GDP	179,408	129,734	152,954	163,513	168,651	179,020	164,000	172,878	125,156	156,477	201,754	300,209	67%
State budget support as % of GDP (direct subsidy only)	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	-2%
State budget support as % of GDP (direct subsidy plus losses) 4/	0.5%	0.7%	0.6%	0.5%	0.5%	0.3%	0.4%	0.4%	0.5%	0.3%	0.3%	0.3%	-51%
PSO Payment per passenger-km (US$)	0.018	0.011	0.013	0.014	0.014	0.014	0.017	0.020	0.013	0.017	0.016	0.023	28%
Rail operating cost per traffic unit (US$) 5/	0.054	0.036	0.042	0.042	0.041	0.045	0.046	0.049	0.041	0.051	0.058	0.068	25%
Rail operating revenue per traffic unit (US$) 6/	0.013	0.008	0.010	0.011	0.011	0.012	0.011	0.011	0.010	0.012	0.015	0.016	27%
Cost coverage ratio	24%	22%	23%	25%	27%	26%	23%	23%	24%	24%	25%	24%	1%

1/ Working ratio (without port and subsidy) defined as: operating costs (excluding port) before depreciation, divided by operating revenue (excluding port and state support).

2/ Working ratio (with port and without subsidy) defined as: operating costs before depreciation, divided by operating revenue (excluding budget support).

3/ Working ratio (with port and subsidy) defined as: operating costs before depreciation, divided by operating revenue.

4/ Most TCDD losses have been covered by equity injection of the Treasury in the form of capital increase.

5/ Rail operating cost defined as: rail operating costs including depreciation.

6/ Excludes budget support.

[23] Based on 2001 data.

Recent Financial Performance

Total traffic volume of the railways rose by 2% in 2004, thanks to a 10% growth in freight, mostly in international transport. Passenger traffic dropped by 9%, due mainly to the terrible accident resulting from the derailment of a passenger train between Ankara and Istanbul. However, TCDD still remains as one of those railways with the lowest traffic density combined with the highest proportions of passenger traffic. Despite traffic and revenue growth, railways' net results deteriorated sharply with a deficit[24] of US$878 million, due mainly to rising cost of labor, materials, interest and depreciation. The working ratio (defined as the operating cost before depreciation, divided by the operating revenue excluding the budget support) also deteriorated from 353% in 2003 to about 366% in 2004. TCDD ports generated US$95 million profit, up from US$85 million recorded in 2003. Most of the railways' deficit were covered by the cross subsidy from the ports, the budget subsidy, and equity injection of the Treasury in the form of capital increase. In 2004, total support from public finance to cover losses as well as capital investment amounted to US$1,023 million which includes US$287 million for operating subsidy, US$380 million for equity injection from Treasury to cover losses and capital investments, and US$356 million on-lent by Treasury for the financing of TCDD's approved investment projects. Total budget support amounts to 0.3% of estimated GDP.

The workforce of TCDD has declined continuously (about 50% since the beginning of 1980s largely as a result of natural attrition and employment freeze policy. About 1,200 workers left TCDD in 2003 as part of the Government initiative providing an additional 20% bonus on the early retirement package. Currently, normal retirement payment is US$23,000-US$27,000 for blue color workers with 25-30 years of service, and US$13,000-S$17,000 for white color workers with 30 years of service. The amount of payment is based on the number of years of service at an annual rate of US$1,000 for blue color and US$500 for white color. The minimum number of years of service to be eligible for retirement is 25 years for men and 20 years for women. The mandatory retirement age is 65 for both men and women. The pension payment averages about 40% of salary for blue color and 70% for white color. The annual gross salary averages about US$19,000 for blue color and US$12,000 for white color. Net pay is about 70% of gross salary.

TCDD currently employs about 29,050 staff, comprising 40% of blue color and 60% of white color employees. While blue color workers are protected by labor unions and collective agreements, white color employees are civil servants and protected by many rules governing civil service employment. About 90% of blue color workers are permanent staff with the remaining 10% filled with temporary workers. Officers of TCDD totaling about 5% of white color employees are permanent civil servants, and the remaining 95% are contractual civil servants. Both temporary blue color workers and contractual civil servants have gained almost permanent staff status since their labor contracts have been renewed every year. In addition, about 4,800 are employed at ports and another 4,300, at three subsidiary companies. Since 2000, TCDD has imposed a hiring freeze according to government policy. However, transfer of staff from other public entities is permitted. While most surplus staff relates to white color jobs, the shortage of skilled trade employees, in particular that of engine drivers, is of serious concern to TCDD.

Subsidiaries and Depots

TCDD has three subsidiaries for maintenance, repair and manufacture of locomotives (Tulomsas), freight wagons (Tudemsas), and passenger coaches (Tuvasas). Mainly because of overstaffing and outdated facilities and equipment, these companies are highly loss-making. TCDD is planning to rehabilitate and modernize them by setting up joint venture with domestic and foreign firms to improve profitability and increase business activities outside TCDD. In addition, TCDD operates about 100 maintenance and repair

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[24] Excluding TCDD ports.

workshops and depots, some of which are now being dissolved and merged to reduce costs. TCDD is also in the process of modernizing and rehabilitating those that will be kept for operation.

Surplus of Assets

TCDD is planning to sell or lease surplus real estate assets to meet its cash needs for modernization and rehabilitation of infrastructure. It has 14,000 buildings and 275 million square meters of land, of which 195 million square meters are covered by the railway track lines and operational buildings. Key actions to facilitate the process would include: (i) inventory of railway real estate assets to identify surplus assets; (ii) assessment of market value; and (iii) examination of various options for selling and leasing, especially in light of the expected sharp increase in the number of suburban train passengers in metropolitan municipalities such as Izmir and Istanbul following completion of ongoing modernization of suburban rail system in 2007 and 2011, respectively.

Passenger Transport

The total number of passengers carried by TCDD fell by 50% during the last decade due mainly to the reduction of suburban passengers as a result of growing alternative urban transport systems. During the period, total passenger kilometers declined by 20%, but passenger revenue increased by over 25% in real terms, because of increase in real tariffs at a rate higher than the decline in ridership. In 2004, TCDD carried 77 million passengers, of which about 65% on suburban lines and 35% on main lines. It generated a total revenue of US$70 million, consisting of about 30% from suburban services and 70% from main lines. While the cost recovery of overall passenger services is about 25%, suburban passenger services have a much higher cost recovery of about 70%, and main lines cover only 20% of cost coverage.

The Government is planning to take the suburban passenger train services into municipal government responsibility. According to the protocol signed between TCDD and Izmir Metropolitan Municipality (IMM) in 2002, IMM is expected to renovate the existing old stations, construct some new stations, and buy new EMUs. TCDD will complete signalization and maintain infrastructure. IMM has to pay track access charges for using the TCDD network, but has an option to have TCDD to provide the services or hire private operators. While about 4 million passengers use the system per year now, IMM expects the annual ridership to start increasing in 2006 upon project completion and reach over 100 million passengers by 2007. Istanbul commuter services are also expected to be transferred to the Metropolitan Municipality.

The main difficulty in operating suburban passenger trains is sharing the same line with the main line trains of TCDD, creating priority problems. In Izmir and Istanbul, construction of two more lines are needed in addition to the existing double lines. In Ankara, the third line has been constructed and the design of the fourth line is in progress. In Istanbul, two suburban lines and one main line will be available when the ongoing Marmaray Project financed by JBIC for under-crossing of Bhosphorus would be completed in 2010. The suburban passenger traffic in Istanbul is likely to drop by 50% in the next several years during the construction period but it will increase sharply after completion of the ongoing rehabilitation project. Total suburban passenger traffic is expected to grow from 1.3 million passenger-km in 2004 to 3 million passenger-km by 2010.

Major problems facing provision of passenger services include: (i) low speed averaging 50 km/hour; (ii) travel time being 60% more than buses; (iii) old coaches and rolling stock; (iv) frequent delays mainly due to breakdown of locomotives; (v) reliance on single lines (95% of total network); (vi) travel distance of TCDD being 30% more than roads; and (vii) light rail and metro services available and being parallel to TCDD lines in metropolitan municipalities.

Freight Transport

Between 1993 and 2004, freight traffic, measured in ton-kilometers, has increased by about 12%. Measured in tons, freight traffic has decreased by about 8%, indicating that average length of haul has grown by 3% from 527 km to 545 km. Over the same period, average freight revenue per ton-km has declined by 40% in real terms. In the next six years, the planned increase in average revenue is 24%. TCDD started running block trains in December 2003 which has reduced the travel time and increased traffic volume significantly. For example, average travel time between Soma and Erzurum has been reduced to 3 days from 8-10 days. Freight volume in net ton-km has increased by 12% in 2004 compared with 2003. About 90% of cargo is now being carried by block trains, and the target for 2005 is to increase to 95%. The block train operation will reduce shunting costs by 60%.

Another important development is the establishment of inland container terminals (ICT) to improve combined transport. The ICT at Gaziantep has been established and is now in operation. The plan is to establish six more ICTs. The ongoing initiative to strengthen the institutional capacity and management structure of major ports would also have a positive impact on freight rail transport. The main commodities carried by TCDD are iron ore, solid minerals (lignite, coal, coke) and construction materials, amounting to about 60% of a total of 9.6 billion ton-km and 50% of freight transport revenue of US$167 million. Petroleum products represent a substantial market still unexploited by TCDD, and their transport would be financially and economically highly profitable. One objective of the project is therefore to assist TCDD in capturing this market.

Borrowing

In the past, in order for TCDD to have access to foreign loans, Treasury borrowed and on-lent these loans to TCDD for the financing of designated investment projects. Total external borrowings, mostly from IFIs since 1968, amounts to about US$2 billion. Total short- and long-term liabilities of TCDD were about US$995 million at end 2003. The current liabilities (US$572 million) of TCDD included current maturity of long-term debt totaling US$316 million, far exceeding its current assets of US$572 million. As of end December 31, 2003, TCDD has outstanding long-term debts of US$200 million. Due to acute illiquidity, the Treasury is servicing the TCDD debts, but appropriate mechanisms need to be set up to help reduce the indebtedness of TCDD to a level which does not impede sound financial management and to improve their financial situation.

Investment Program

The ongoing program includes the construction of a new high speed Ankara-Istanbul line (double track). The first phase rehabilitation of 240 km between Ankara and Eskisehir has been contracted out to the consortium of Spanish companies and Alsim-Alarko (Turkey). The works are scheduled to be completed in 2006 with an estimated total cost of €637 million, funded partly by the Spanish Government and partly by export and commercial credit. The feasibility study/application design study for the second phase of 322 km between Eskisehir and Istanbul with an estimated cost of EUR 700 million is under preparation. Tender has been launched early in 2005 and is about to be completed. After completion, the maximum speed will increase from 120 km/hour to 250 km/hour, and the travel time will be reduced from 8 hours to 3 hours with the new trains sets. TCCD is planning to purchase 10 new Electric Multiple Units (EMUs) at an estimated cost of US$150 million with foreign loans.

Framework for Reform Program

A framework for restructuring TCDD prescribed both in the Letter of Sector Development Policy and the Business Plan for 2005-2010 comprises ten key dimensions:

- setting up a new legal framework for restructuring of TCDD related to reorganization including its relationship with Treasury (in particular refinement of Public Service Contracts), separation of infrastructure from operations to increase transparency and accountability, and labor retrenchment;
- shifting from a regional structure to a line of business structure;
- devolving to municipalities or third parties responsibility for suburban passenger services;
- reducing inter-city passenger services where alternative transport modes are readily available at a competitive price and reducing excess railway network;
- downsizing workforce to reduce fixed costs;
- setting passenger tariffs and freight rates at price according to cost and market conditions to gradually improve cost recovery;
- exploring market niches and developing freight traffic;
- rehabilitating, modernizing and developing transport facilities and capacities, in particular information technology, a central element for business units;
- divesting from non-core activities to provide better long-term value for money for TCDD, and closing down or merging surplus workshops; and
- selling, leasing and disposing of surplus properties.

Projected Future Financial Situation

The Bank's financial projections show that the implementation of the above reform program will lead to substantial financial improvements by the end of project period. The overall railway deficit[25] is expected to decrease in six years by about 30% from about US$548 million in 2004 to US$380 million in 2010. The improvements will be achieved mainly through labor cost reduction and increase of traffic volume and cost coverage ratios, both for freight and passenger services. In particular suburban passenger traffic is expected to increase the cost coverage ratio substantially from 70% in 2004 to 100% by 2010. The performance will depend on the agreement with the municipal governments of Izmir and Istanbul regarding transfer and operation of new suburban passenger system, analysis of the possible disposal of non-operational railway real estate assets and actual sales proceeds, speed of private participation of core and non-core services, and the market response to the planned reforms.

During 2005-2010, railway operating revenues are estimated to grow by 72%. The growth of revenue will be met through: (i) estimated increase of traffic volume by 50% driven by modernization and rehabilitation of infrastructure financed under the project and the ongoing Ankara-Istanbul High Speed train project financed by the Spanish bilateral fund; and the new suburban passenger system in Izmir that is to become operational in 2007; and (ii) estimated 15% increase of unit average revenue from US$0.016/TU to US$0.019 /TU.

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[25] Excluding depreciation for operating cost and state support for operating revenue.

The operating cost (excluding depreciation) is expected to fall by 16%. Staff reduction is the principal restructuring measure leading to an important annual labor cost reduction. Labor accounts for over 50% of the rail operating cost and 218% of the operating revenue. Port will also shed its staff and will be separated from TCDD by end 2007. Three affiliated companies are expected to be privatized during the project implementation period.

Net railway deficit (excluding depreciation) and need for Government support is estimated to decrease from US$548 million in 2004 to US$380 million in 2010. The working ratio (without ports and subsidy) will improve from 366% in 2004 to 180% in 2010. The railway will require substantial levels of budgetary support for the foreseeable future both for support of passenger services and investment. There is need and scope for much more radical restructuring including closure of uneconomic lines and services and private participation in core transport operations and infrastructure maintenance that will bring substantial financial improvements. Greater emphasis will be given to maintaining political will and impetus for much stronger reform under the umbrella of the project implementation. The key issues on uneconomic services and adequate compensation for public service obligations would be addressed through the planned EU-financed TA..

Financial Performance Benchmark

The project will support the transformation of the railway industry into a fully commercial enterprise with gradually reduced Government financial support. It was agreed that progress towards the financial sustainability of TCDD will be measured in terms of the improvement in the working ratio to achieve a target of about 180% or less by 2010 from 366% posted in 2004.

Sensitivity analysis has been performed by assuming no growth in freight traffic and rates; delaying labor restructuring by 12 months and 24 months; and delaying the labor restructuring by 24 months as well as constant freight traffic and rates. Summary results indicate that, in cases less favorable than the base case, TCDD together with the Government would have to take a combination of measures including rationalization of network and operations, deferral of infrastructure maintenance, and increase of subsidies. If TCDD were to fall to a financial worst-case scenario with a 24-month delay in staff retrenchment and no growth in freight traffic and rates, the Government would have to bail out with additional subsidies of US$660 million between 2005 and 2010.

Sensitivity of Financial Targets to Various Risk Factors
(amount in US$ million)

Scenario	2004		2005		2006		2007		2008		2009		2010	
	WR	end-year deficit	WR	end-year deficit	WR	end-year deficit	WR	end-year deficit	WR	end-year deficit	WR	end-year deficit	WR	end-year deficit
Base Case	366%	(727)	320%	(647)	285%	(593)	269%	(564)	202%	(468)	192%	(443)	180%	(414)
Sc.1: Freight traffic and rates remain constant	366%	(727)	334%	(659)	315%	(620)	316%	(607)	241%	(529)	234%	(512)	230%	(505)
Sc.2: Labor restructuring delayed by 1 year	366%	(727)	343%	(709)	300%	(634)	278%	(590)	209%	(493)	198%	(465)	182%	(423)
Sc.3: Labor restructuring delayed by 2 years	366%	(727)	343%	(709)	322%	(695)	292%	(631)	215%	(519)	205%	(490)	187%	(445)
Sc.4: Labor restructuring delayed by 2 years. freight traffic and rates remain constant	366%	(727)	359%	(720)	356%	(722)	344%	(675)	257%	(580)	249%	(559)	239%	(536)

WR: working ratio excluding subsidy

Operational and financial forecast
(amount in US$ million; 2005-2010 constant end-2004 prices)

	2004	2005	2006	2007	2008	2009	2010	2004-2010	per year
exchange rate	1.5								(%)
Suburban passenger-km (billion)	1.33	1.37	1.42	0.97	5.94	6.05	6.28	373%	25%
Mainline passenger-km (billion)	3.99	4.53	4.62	3.97	4.11	4.15	4.18	5%	-1%
Total passenger-km (billion)	5.32	5.91	6.05	4.94	10.05	10.19	10.46	96%	9%
Freight ton-km (billion)	9.56	10.11	10.33	10.55	11.23	11.56	11.89	24%	5%
Total traffic units (TU)	14.89	16.01	16.37	15.49	21.28	21.76	22.35	50%	6%
Average passenger revenue(US$/pkm)	0.014	0.014	0.014	0.015	0.015	0.015	0.015	7%	4%
Average freight revenue(US$/tkm)	0.017	0.018	0.019	0.020	0.020	0.020	0.022	24%	4%
Overall average revenue(US$/tu)	0.016	0.016	0.017	0.018	0.018	0.018	0.019	15%	4%
Rail operating revenue(US$ million)									
Passenger	75.8	79.8	83.1	76.4	151.7	155.0	159.5	110%	12%
Freight	167.0	178.160	193.785	210.047	228.203	236.414	258.373	55%	9%
Total operating revenue	242.8	258.0	276.9	286.5	379.9	391.4	417.9	72%	10%
Rail operating expenses(US$ million)									
Labor	528.7	467.3	426.0	400.0	374.7	352.7	344.0	-35%	-1%
Other operating expenses	360.3	357.3	363.0	370.0	392.3	400.7	407.0	13%	1%
Total operating expenses (excluding dep.)	889.0	824.7	789.0	770.0	767.0	753.3	751.0	-16%	0%
Rail non operating and financial revenues	129.3	129.3	129.3	129.3	129.3	129.3	129.3	0%	5%
Rail non-operating and financial expenses	210.0	210.0	210.0	210.0	210.0	210.0	210.0	0%	10%
Non op. profit/(deficit)	(80.7)	(80.7)	(80.7)	(80.7)	(80.7)	(80.7)	(80.7)		28%
Operating deficit, before depreciation (US$ m)	(726.9)	(647.4)	(592.8)	(564.2)	(467.8)	(442.6)	(413.8)	-43%	-4%
Working ratio (without subsidy)	366%	320%	285%	269%	202%	192%	180%	-51%	
									(878)
Depreciation	151.0	155.0	270.0	330.0	360.0	370.0	380.0	152%	
Unit operating cost (incl. depreciation)	0.07	0.06	0.06	0.07	0.05	0.05	0.05	-28%	
Rail cost coverage (total revenue/total costs)	34%	37%	41%	42%	52%	54%	57%	68%	10%

Annex 10: Safeguard Policy Issues

TURKEY: RAILWAYS RESTRUCTURING

ENVIRONMENTAL ASSESSMENT

The project is in full compliance with all environmental regulations, policies and procedures of the Government of Turkey and the World Bank. In accordance World Bank safeguard policies, the project is rated environmental category B and an Environmental Management Plan (EMP) has been prepared by TCDD. The TCDD has agreed to conduct public consultations and to disclose the Turkish language EMP publicly in Turkey and to send the English language version to the World Bank for placement in the Infoshop.

The project is expected to trigger only minor issues associated with the movement of men, machines and materials during the construction phase (e.g. dust, noise, etc.). The Environment management plan concluded that the issues are of limited duration, limited in a real extent and easily mitigated with standard procedures of good engineering design and practice. The EMP details effectively the mitigation program, monitoring program, institutional arrangements for effective implementation, schedule, and institutional development needs.

The Bank is highly satisfied with the EMP delivered promptly by TCDD, showing the concern of the staff for these issues. Yet, the Bank urges TCDD to establish a unit responsible for environment management. Indeed, although there are knowledgeable staffs within TCDD, there is no formal environment unit in the organization. Likewise there is no institutional capacity for emergency response planning and management. The project will include a technical assistance component to strengthen these capabilities and the Borrower has agreed to create an environmental unit within TCDD.

The World Bank policy on cultural heritage will not be triggered, as all the works will be implemented in a zone that has already been explored during the construction of the railroad. However, the team assured that provisions related to unexpected findings will be included in a all construction contracts and the Environmental Management Plan.

SOCIAL ASSESSMENT

The overall impact of this project will be country-wide and positive, although it will have a negative impact on some employees who are released due to restructuring, Measures are included to mitigate this impact, however, by making the downsizing process transparent, maximizing voluntary retirement, providing various support mechanisms to assist employees adjust, and implementing the program at a pace that will enable affected workers to prepare in advance for the change. The project does not trigger social safeguards policies.

The Project supports the Government's policy to improve the country's railway network, make rail transportation more effective and safer. Improved railway transport networks and services are also expected to attract foreign and local investors to do business across the country and not only around largest cities. This, in turn, is expected to contribute to more evenly distributed economic growth and reduce regional disparities. Reliable transport services facilitate access to schools, health and job markets. Road works also generate substantial employment.

TCDD has operated under a policy of no hiring/no layoff for a decade or more and a reduction in employment levels, was achieved through natural attrition and the special provisions that provided an additional lump sum top-up of 20% over the "end of service" compensation to workers eligible for early retirement. For this reason, there is little TCDD experience dealing with the social impact on railway workers of a broader program of staff adjustment associated with restructuring. However, there is recent experience with social impact associated with the privatization of state enterprises upon which the proposed component draws.

According to the recent social monitoring survey data in the Bank's Privatization Social Support Project (PSSP), the most vulnerable group is prime age workers with families and financial commitments between 30-45 years of age and not those close to retirement as was originally anticipated when the PSSP was implemented. The main beneficiaries of "end of service" or severance compensation in the proposed project will be determined when specific functional areas of redundancy are identified by TCDD with the assistance of specialized consultant.. Two stakeholder workshops were held during appraisal that provided opportunities to discuss the implications of the TCDD business plan and associated restructuring on the labor force with senior management, union leaders and external stakeholders and middle-level management, respectively. These will be followed by similar workshops when subsequent consultant reports are released, and during the preparation of a detailed implementation plan, to offer an opportunity for stakeholder input at each stage. TCDD will also launch an ongoing information campaign to keep employees and the public aware of the changes that are planned and underway, in order to help employees anticipate and adjust to the changes. In addition, TCDD will set up an independent social monitoring program to monitor and assess social impacts of restructuring and to identify unanticipated impacts that need to be addressed.

Annex 11: Project Preparation and Supervision

TURKEY: RAILWAYS RESTRUCTURING

	Planned	Actual
PCN review	11/22/2003	11/22/2003
Initial PID to PIC	01/03/2004	01/03/2004
Initial ISDS to PIC	06/30/2004	06/30/2004
Appraisal	02/01/2005	03/15/2005
Negotiations	05/17/2005	05/06/2005
Board/RVP approval	06/09/2005	
Planned date of effectiveness	09/01/2005	
Planned date of mid-term review	07/01/2007	
Planned closing date	06/30/2009	

Key institutions responsible for preparation of the project: TCDD

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Michel Audigé	Program Team Leader	ECSIE
Olivier Le Ber	Co-Team Leader	ECSIE
Dilek Barlas	Senior Counsel	LEGEG
Stan Peabody	Lead Safeguards Specialist	ECSSD
Sunja Kim	Senior Financial Analyst	ECSIE
Martin Humphreys	Senior Transport Economist	ECSIE
Alptekin Orhon	Senior Financial Analyst	ECCO7
Ibrahim Sirer	Senior Procurement Specialist	ECCO7
Seda Ayromak	Senior FMS Specialist	ECCO7
Karim Budin	Railways Specialist	Consultant
Jolanta Hess	Labor Specialist	Consultant
Hakan Mat	Financial Specialist	Consultant
Bernard Baratz	Environmental Specialist.	Consultant
Julie Morel	Project Officer	Consultant
Paul Amos	Lead Railways Specialist	Peer reviewer
Mirtha Pokorny	Lead Transport Economist	Peer reviewer
Coral Bird	Project Assistant	ECSIE
Elif Yukseker	Project Assistant	ECCO7
Ulker Karamullaoglu	Program Assistant	ECCO7

Bank funds expended to date on project preparation:

1. Bank resources: $250,000
2. Trust funds: $700,000
3. Total: $950,000

Estimated Approval and Supervision costs:

1. Remaining costs to approval: $50,000
2. Estimated annual supervision cost: $100,000.

Annex 12: Documents in the Project File

TURKEY: RAILWAYS RESTRUCTURING

- World Bank OED, Turkish Railway Project Completion Report, 1985
- World Bank OED, Second Railway Project Completion Report, 1995
- Booz Hallen & Hamilton , Turkish State Railways restructuring Study, 1996
- World Bank, Options for Reform: Turkish State Railways, June 2002
- Halcrow Group Limited & Carl Bro, Assistance to Turkish State Railways: Gap Analysis and Action Plan, March 2003
- World Bank, mission Aide Memoire, April 2004
- CANAC, TCDD Interim Report, November 2004
- World Bank mission Aide Memoire, November 2004
- World Bank, Project Information Document, December 2004
- Signed Letter of Sector Development Policy, December 2004
- Project Implementation Plan (PIP), January 2005
- CANAC, Reports Phase A & B, February 2005
- World Bank mission Aide Memoire, February 2005
- TCDD, 2005-2010 Business Plan, February 2005
- Project Environmental Management Plan (EMP) – March 2005
- CANAC, Reports Phase C & D, March 2005

Annex 13: Statement of Loans and Credits

TURKEY: RAILWAYS RESTRUCTURING

			Original Amount in US$ Millions						Difference between expected and actual disbursements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P094176	2005	ECSEE APL #2 (TURKEY) (CRL)	66.00	0.00	0.00	0.00	0.00	65.29	0.00	0.00
P066149	2005	SEC EDUC	104.00	0.00	0.00	0.00	0.00	107.30	0.00	0.00
P070950	2004	ANATOLIA WATERSHED REHAB	20.00	0.00	0.00	0.00	0.10	19.55	-0.05	0.00
P072480	2004	RENEW ENERGY	202.03	0.00	0.00	0.00	1.01	198.01	0.99	0.00
P074053	2004	HEALTH TRANSIT (APL #1)	60.61	0.00	0.00	0.00	0.30	60.32	4.14	0.00
P075094	2004	WATERSHED REHAB (GEF)	0.00	0.00	0.00	7.00	0.00	6.75	0.15	0.00
P082801	2004	EFIL 2	303.10	0.00	0.00	0.00	0.00	92.61	-147.49	0.00
P082996	2004	PFPSAL 3	1,000.00	0.00	0.00	0.00	0.00	500.00	-333.33	0.00
P059872	2003	BASIC ED 2 (APL #2)	300.00	0.00	0.00	0.00	0.00	291.46	271.03	52.79
P074408	2002	SRMP	500.00	0.00	0.00	0.00	0.00	259.67	224.31	-4.19
P070286	2002	ARIP	600.00	0.00	0.00	0.00	0.00	273.71	267.04	50.48
P069894	2001	PRIV SOC SUPPRT	250.00	0.00	0.00	0.00	0.00	7.21	7.21	-40.79
P068368	2000	MARMARA EARTHQUAKE EMG RECON	505.00	0.00	0.00	0.00	0.00	284.36	284.36	26.81
P044175	2000	BIODIV/NTRL RES MGMT (GEF)	0.00	0.00	0.00	8.19	0.00	4.39	3.66	0.25
P009073	1999	INDUSTRIAL TECH	155.00	0.00	0.00	0.00	0.00	19.97	19.97	0.00
P048852	1998	NAT'L TRNSM GRID	270.00	0.00	0.00	0.00	27.79	124.25	152.04	56.39
		Total:	4,335.74	0.00	0.00	15.19	29.20	2,314.85	754.03	141.74

TURKEY
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2005	Acibadem	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Alternatif Bank	0.50	0.00	0.00	0.00	0.50	0.00	0.00	0.00
1996/01/03	Arcelik	19.90	0.00	0.00	0.00	19.90	0.00	0.00	0.00
2000	Arcelik LG Klima	11.17	0.00	0.00	0.00	11.17	0.00	0.00	0.00
2002	Assan	22.50	0.00	0.00	0.00	22.50	0.00	0.00	0.00
2002	Atilim	6.50	0.00	0.00	0.00	6.50	0.00	0.00	0.00
2000	Banvit	10.00	5.00	0.00	0.00	10.00	5.00	0.00	0.00
	Bayindirbank A.S	3.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00
2002	Beko	33.62	0.00	0.00	28.82	33.62	0.00	0.00	28.82
2001	Bilgi	9.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00
1994/96/97	Borcelik	9.09	3.21	0.00	0.00	9.09	3.21	0.00	0.00

2004	Borusan Holding	30.00	0.00	10.00	0.00	30.00	0.00	10.00	0.00
1994	CBS Holding	3.50	0.00	0.00	0.00	3.50	0.00	0.00	0.00
1990/02	Conrad	3.15	0.00	0.00	0.00	3.15	0.00	0.00	0.00
2002	EKS	11.25	0.00	0.00	0.00	11.25	0.00	0.00	0.00
2004	Ege	10.00	0.00	0.00	8.00	10.00	0.00	0.00	8.00
1995	Entek	19.00	0.00	0.00	9.94	19.00	0.00	0.00	9.94
1999	Finansbank	3.33	0.00	0.00	0.00	3.33	0.00	0.00	0.00
2004	Garanti Leasing	10.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00
1999	Gumussuyu Kap	4.00	0.00	3.76	0.00	4.00	0.00	3.76	0.00
2001	Gunkol	6.20	0.00	6.25	0.00	6.20	0.00	6.25	0.00
1998	Indorama Iplik	4.38	0.00	0.00	0.00	4.38	0.00	0.00	0.00
1998/00/02	Ipek Paper	11.14	0.00	0.00	0.00	11.14	0.00	0.00	0.00
1990	Kepez Elektrik	2.43	0.00	0.00	0.00	2.43	0.00	0.00	0.00
1988/90	Kiris	11.66	0.00	0.00	0.00	11.66	0.00	0.00	0.00
2004	Koclease	30.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
1991	Kula	5.26	0.00	0.00	0.00	5.26	0.00	0.00	0.00
2003	MESA Group	11.00	0.00	0.00	0.00	11.00	0.00	0.00	0.00
2004	Meteksan Sistem	0.00	0.00	8.50	0.00	0.00	0.00	8.50	0.00
2002	Milli Re	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998/02	Modern Karton	10.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00
1991	NASCO	10.18	0.00	0.00	3.55	10.18	0.00	0.00	3.55
2004	OPET	25.00	0.00	0.00	40.00	8.33	0.00	0.00	25.00
2004	Oyak Bank	50.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00
2002	Pasabahce	3.75	0.00	0.00	0.00	3.75	0.00	0.00	0.00
1998	Pinar ET	3.93	0.00	0.00	0.00	3.93	0.00	0.00	0.00
2000	Pinar SUT	13.08	0.00	0.00	0.00	9.30	0.00	0.00	0.00
1999	SAKoSa	16.96	0.00	0.00	6.82	16.96	0.00	0.00	6.82
1990	Silkar Turizm	2.01	0.00	0.00	2.28	2.01	0.00	0.00	2.28
2002/03	Sise ve Cam	69.64	0.00	0.00	43.52	69.64	0.00	0.00	43.52
2002	Soktas	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00
1999	TEB Finansal	0.56	0.00	0.00	0.00	0.56	0.00	0.00	0.00
2005	TSKB	0.00	0.00	50.00	0.00	0.00	0.00	50.00	0.00
1982/83/89/91/96/99	Trakya Cam	0.00	0.54	0.00	0.00	0.00	0.54	0.00	0.00
1999/02	Turk Ekon Bank	13.33	0.00	15.00	0.00	13.33	0.00	15.00	0.00
2001	Turkish PEF	0.00	10.00	0.00	0.00	0.00	2.52	0.00	0.00
1999	Unye Cement	8.44	0.00	0.00	0.00	8.44	0.00	0.00	0.00
1999	Uzel	8.40	0.00	0.00	4.95	8.40	0.00	0.00	4.95
1998	Viking	8.33	0.00	0.00	0.00	8.33	0.00	0.00	0.00
	Total portfolio:	617.19	18.75	93.51	147.88	526.74	11.27	93.51	132.88

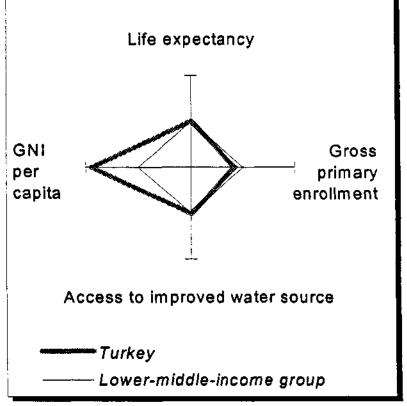
		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
2001	Akbank	0.03	0.00	0.00	0.00
2004	Akbank BLoan Inc	0.00	0.00	0.00	0.02
2005	Arcelik-Reg. Exp	0.11	0.00	0.00	0.11
2005	Avea	0.12	0.00	0.00	0.30
2005	Bandirma Dogalga	0.00	0.00	0.00	0.00
2005	Gemlik Dogalgaz	0.00	0.00	0.00	0.00

Annex 14: Country at a Glance

TURKEY: RAILWAYS RESTRUCTURING

POVERTY and SOCIAL	Turkey	Europe & Central Asia	Lower-middle-income
2003			
Population, mid-year *(millions)*	70.7	473	2,655
GNI per capita *(Atlas method, US$)*	2,800	2,570	1,480
GNI *(Atlas method, US$ billions)*	197.8	1,217	3,934
Average annual growth, 1997-03			
Population *(%)*	1.7	0.0	0.9
Labor force *(%)*	2.3	0.2	1.2
Most recent estimate (latest year available, 1997-03)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	66	63	50
Life expectancy at birth *(years)*	70	69	69
Infant mortality *(per 1,000 live births)*	35	31	32
Child malnutrition *(% of children under 5)*	8	..	11
Access to an improved water source *(% of population)*	82	91	81
Illiteracy *(% of population age 15+)*	14	3	10
Gross primary enrollment *(% of school-age population)*	94	103	112
Male	98	104	113
Female	91	102	111

Development diamond*

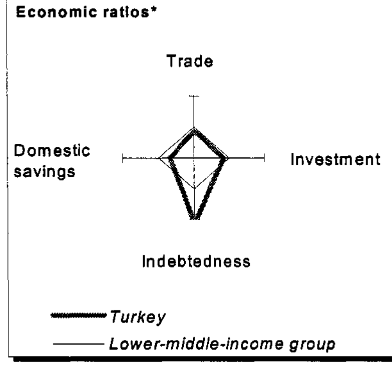


KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1983	1993	2002	2003
GDP *(US$ billions)*	61.5	179.4	183.9	240.4
Gross domestic investment/GDP	16.3	27.6	21.3	22.8
Exports of goods and services/GDP	12.5	13.7	29.2	27.4
Gross domestic savings/GDP	12.2	21.9	19.8	19.5
Gross national savings/GDP	15.3	24.8	20.8	19.5
Current account balance/GDP	-3.1	-3.6	-0.8	-2.8
Interest payments/GDP	2.9	2.2	3.8	3.2
Total debt/GDP	33.0	38.2	71.3	61.2
Total debt service/exports	39.2	31.6	50.7	40.3
Present value of debt/GDP	..	..	73.1	..
Present value of debt/exports	..	..	234.2	..

	1983-93	1993-03	2002	2003	2003-07
(average annual growth)					
GDP	5.0	2.7	7.9	5.8	5.6
GDP per capita	2.8	0.9	6.2	4.2	4.1
Exports of goods and services	5.9	11.4	11.1	16.0	5.4

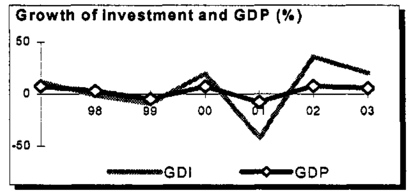
Economic ratios*



STRUCTURE of the ECONOMY

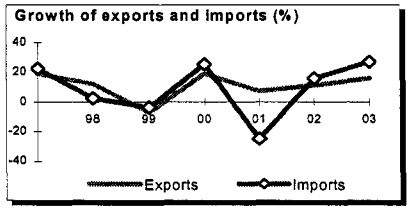
	1983	1993	2002	2003
(% of GDP)				
Agriculture	21.4	16.2	13.0	13.4
Industry	25.0	29.8	23.7	21.9
Manufacturing	16.8	18.3	14.0	13.3
Services	53.6	54.0	63.3	64.7
Private consumption	78.4	65.0	66.2	66.9
General government consumption	9.4	13.0	14.0	13.6
Imports of goods and services	16.6	19.3	30.7	30.7

Growth of investment and GDP (%)



	1983-93	1993-03	2002	2003
(average annual growth)				
Agriculture	1.5	1.0	7.4	-2.4
Industry	6.7	2.2	5.6	5.0
Manufacturing	6.9	3.0	8.2	8.4
Services	4.3	3.0	7.3	6.4
Private consumption	4.7	1.9	2.2	6.7
General government consumption	4.0	3.9	5.4	-2.4
Gross domestic investment	7.7	1.0	35.9	20.4
Imports of goods and services	11.4	7.8	15.8	27.1

Growth of exports and imports (%)

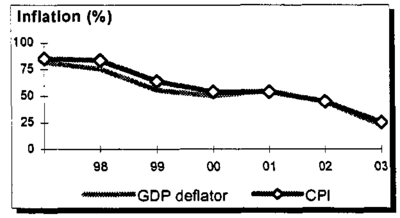


Note: 2003 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

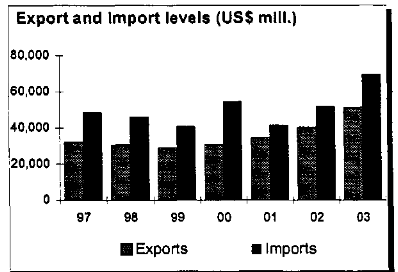
PRICES and GOVERNMENT FINANCE

	1983	1993	2002	2003
Domestic prices				
(% change)				
Consumer prices	31.4	66.4	44.8	25.2
Implicit GDP deflator	26.3	67.8	44.1	22.5
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	19.0	31.2	30.4
Current budget balance	..	-3.1	-5.1	-5.3
Overall surplus/deficit	..	-12.0	-11.9	-10.1



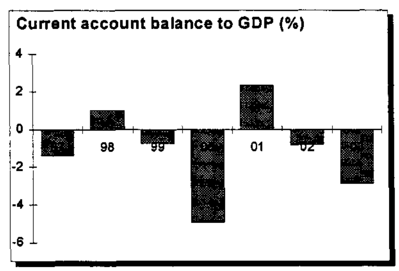
TRADE

	1983	1993	2002	2003
(US$ millions)				
Total exports (fob)	5,905	15,345	40,124	51,206
Agricultural and livestock	1,032	1,044	2,089	2,545
Mining and quarry products	188	233	387	543
Manufactures	4,685	14,068	33,565	43,912
Total imports (cif)	9,235	29,428	51,554	69,340
Food	123	969	1,245	2,006
Fuel and energy	3,851	3,903	9,192	11,568
Capital goods	2,311	7,499	9,103	11,792
Export price index *(1995=100)*	89	92	75	82
Import price index *(1995=100)*	100	85	73	83
Terms of trade *(1995=100)*	89	109	102	99



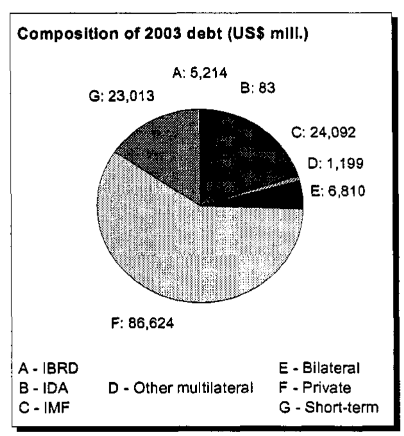
BALANCE of PAYMENTS

	1983	1993	2002	2003
(US$ millions)				
Exports of goods and services	7,865	26,264	54,907	70,231
Imports of goods and services	10,118	33,721	55,365	73,760
Resource balance	-2,253	-7,457	-458	-3,529
Net income	-1,430	-2,744	-4,554	-5,427
Net current transfers	1,760	3,768	3,490	2,106
Current account balance	-1,923	-6,433	-1,522	-6,850
Financing items (net)	2,075	6,741	7,675	10,897
Changes in net reserves	-152	-308	-6,153	-4,047
Memo:				
Reserves including gold *(US$ millions)*	2,253	17,762	38,051	44,957
Conversion rate *(DEC, local/US$)*	226.0	11,046.7	1,509,471	1,496,668



EXTERNAL DEBT and RESOURCE FLOWS

	1983	1993	2002	2003
(US$ millions)				
Total debt outstanding and disbursed	20,324	68,605	131,058	147,035
IBRD	2,336	5,285	5,367	5,214
IDA	184	142	89	83
Total debt service	3,138	8,664	29,092	29,172
IBRD	274	1,183	708	728
IDA	4	7	7	7
Composition of net resource flows				
Official grants	98	403	..	..
Official creditors	327	-740	224	-1,217
Private creditors	139	6,104	6,901	-511
Foreign direct investment	46	622	863	1,063
Portfolio equity	0	189	-1,183	2,250
World Bank program				
Commitments	675	207	1,650	0
Disbursements	486	354	1,031	276
Principal repayments	115	753	443	502
Net flows	371	-399	588	-226
Interest payments	163	437	272	233
Net transfers	208	-836	316	-459



MAP SECTION