

Traceca: Central Asian Railways
Restructuring Project
Module A: Kazakhstan Railway
Restructuring Study
Inception Report
September 1997



TRACECA

Central Asian Railways Restructuring - Kazakhstan

Project Title :	TRACECA : CENTRAL ASIAN RAILWAY RESTRUCTURING	
Project Number :	TNREG 9602	
Country :	KAZAKHSTAN	
	Local operator	EU Consultant
Name :	C I E CONSULT/SYSTRA	C I E CONSULT/SYSTRA
Address :	Room 415, Kazakhstan Temir Zholy, Furmanov Str and Vinogradov, Almaty.	Grattan Bridge House, 3 Upper Ormond Quay Dublin 7, Ireland.
Tel. number :	+ 7- 3272 625127	+ 353- 1 703 4701
Fax number :	+7- 3272 625127	+ 353-1-703 4725
Telex number :		
Contact person :	David Waters	Michael Barry
Signatures :		

Date of report : 8 Sept 1997.

Reporting period : August 1997

Author of report : David Waters

EU M & E team	_____	_____	_____
	(name)	(signature)	(date)
EU Delegation	_____	_____	_____
	(name)	(signature)	(date)
TACIS Bureau	_____	_____	_____
(task manager)	(name)	(signature)	(date)



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INTRODUCTION

This project for the restructuring of Kazakhstan Railways forms Module A for the Tacis Traceca Restructuring Study of the Central Asia Railways. The project is being financed and managed by Tacis/Traceca in collaboration with the EBRD.

This is the Inception Report

1 Project Synopsis

1.1 Objectives

- The objective of this report is to assist KTZ and the government of Kazakhstan to transform the railway into a commercially and market driven railway company.
- The team will assist the railways in setting up a Restructuring Task Force which would provide the leadership in implementing various facets of the restructuring.
- The study will provide a framework for the financial and economic analysis of investment in accordance with market principles. Priority investments for the period 1998 to 2002 will be assessed.
- To expedite early implementation of improved Management Information System.
- Key areas for harmonisation in the transport of international freight traffic will be identified particularly in the areas of operations, traffic, tariff, and customs procedures.
- Existing studies will be taken into consideration.
- Environmental obligations and regulations of the terms of reference will be established and assessed taking into account national laws.

1.2 Project activities

All aspects of the railway activity will be assessed by a group of thirteen international experts and recommendations made to achieve the objectives of the study. Interviews will be held with the relevant people in the ministry and the railways.

The Institutional expert will assess the present situation in relation to the administration and its regulatory authority and particularly as it affects freight and passenger business. Comment will be made on the investment and maintenance backlog and the staffing situation. The major issue of how to split the various entities of the railways will be dealt with. Comment will be made on existing proposals particularly in relation to privatisation.

A review of transport law as it affects the railway will be given.

A review of the financial situation and performance will be carried out. Accounting policies will be discussed, and commented upon.

Costing of various traffics will be undertaken in order to identify profitable and non profitable traffics.

A review of railway operations with particular attention been given to improved efficiency utilisation of mobile assets will be carried out. Manpower situation will be assessed.

The present MIS will be assessed in relation to communications hardware and software.

The condition of the infrastructure will be examined as will the maintenance procedures and track renewal systems. Investment proposals will be assessed. The signalling system will be examined to ensure that it can meet the future needs of KTZ.

A detailed review of all rolling stock will be carried out. A review of maintenance procedures will also be undertaken. Investment proposals will be assessed.

A review of aspects of human resource policy will be carried out.

Models for possible privatisation of the railways will be developed.

Investment proposals will be financially and economically assessed.

1.3 Needs of the beneficiaries

Kazakhstan railways are the backbone of the transport in the country. Prior to the break-up of the Soviet Union Kazakhstan railways were part of the Soviet Ministry of Railways (MPS). The three railways in Kazakhstan (Almatinskaja, Tselinnaja and Zapadno-Kazakhskaja) consisted of 13,528 route kms of rail track including 5,500 km of double track. Nearly 3,500 kms of the route is electrified. Kazakhstan railways as in other member states of the former Soviet Union have suffered a severe drop in traffic falling by some 60% since 1990. Kazakhstan tariffs also lagged behind the general price inflation, while huge arrears of unpaid freight charges accumulated. Consequently railway finances have sharply deteriorated, despite strong restraint on expenditure including routine maintenance, capital replacement, and new investments. For many employees payments are behind schedule.

The economy of Kazakhstan depends heavily on the railways carrying approx. 80% of the freight traffic. While the modal split may change in the future the railway will continue to play a dominant role. As the economies of the central Asian states and China improve new business opportunities will present themselves to an efficient railway.

Kazakh Temir Zholy (KTZ) is the 7th largest railway in the world and is now reaching a critical stage in preparing itself to prosper in the new

market economy. Its financial situation is precarious. By western accounting standards it is estimated that the railways made a pre-tax loss in 1996 of Tenge 20 billion (\$266 m). Obviously this matter has to be addressed as a matter of urgency. It would appear that operating expenses exceed revenues by approx 30%. KTZ are also burdened with large amounts of accounts payable which may be counter balanced somewhat by accounts receivable although there is a view that a large portion of this may have to be written off as bad debts. In order to retain its transit traffic which accounts for 20% of the volume and 40% of the revenue it is necessary to retain close liaison with adjoining railway companies particularly in relation to agreed tariffs.

A map of the railway system is shown in annex no 1.

1.4 *KTZ restructuring*

In January 1997 restructuring of the railways began with the amalgamation of the three railway administrations into one administration (KTZ). In July 1997 six railway divisions were created. In the first six months of 1997 the numbers in the railway have been reduced by another 12,500. The pace of restructuring is moving very fast.

A business plan prepared by Winner Associates will be presented in Sept 1997. This business plan is sponsored by the EBRD.

Investment proposals worth \$300 supported by the EBRD have been proposed and are currently under consideration.

This final restructuring report sponsored by TRACECA under the TACIS programme will be presented in January 1998.

2 Analysis of project

2.1 Project start up

2.1.1 Organisation of teams

General

The Project Manager Mr D Waters arrived in Almaty on the 8th of August accompanied by the Institutional Expert Mr P O Jennings and the Financial Expert Mr G O Mahony. They were joined later by Rolling Stock Expert Mr A Cazarré, MIS Expert Mr O Dereudre, Legal Expert Mr M Carroll, Institutional Expert Mr V Herriau, Operational Expert Mr T Baake, and Human Resources Expert Mr J P Bahuaud.

The Project Director for the Central Asian States Railways Restructuring Project Mr J F Higgins visited the team to give overall direction to the project.

On arrival in Almaty the team worked closely with the EBRD who had a mission in Almaty at that time. In-depth discussions were held with the EBRD team and also the Winner team who are preparing the BUSINESS PLAN for the railways. There was a generous exchange of information between the teams. For the first two weeks the team worked out of the EBRD offices and are now situated in the railway headquarters offices.

An office manager has been recruited as have a number of interpreters.

Office equipment has been acquired and installed.

Counterparts

Agreement has been reached in relation to the nomination of personnel from the railway to form counterpart teams to the experts.

Meetings and Visits

The Project Manager has had meetings with numerous officials from the Ministry of Transport and Communications, KTZ, EBRD, and associated Consultants.

These included meetings with the Vice Minister of Transport Mr Aliguzhinov, Head of Railway Dept at the ministry Mr Segal, Deputy General Director KTZ Mr Shneidmyuller, Head of Main Economic Department KTZ Mr Aatayev, and Mr Ziller of the EBRD.

The Project Manager has visited various railway installations including the railway stations in Almaty, Almaty 1 and Almaty 2, Central Traffic Control in Almaty and a locomotive depot. He has also visited Akmola for

meetings with officials of the MOT.

The Legal Expert and the Institutional Expert have also visited Akmola for discussions with Ministry officials.

The Infrastructure Expert has visited and inspected track condition in what were previously the three separate railway companies i.e. Almatinskaja, Tselinnaja and Zapadno-Kazakhskaja regions.

The Rolling Stock Expert and the MIS Expert have visited various location. All experts have met with counterpart experts from the railway in order to get a clear understanding of the problems and operations of the railways.

Project Implementation

The project will be executed by a group of thirteen well qualified and experienced experts. The project will be completed in three phases. The Inception phase now complete lasted one month. The next phase will be completed at the end of November when a draft final report will be presented. After discussions with interested parties the final report will be presented at the end of January.

All experts have met with counterpart experts from the railway in order to get a clear understanding of the problems and operations of the railways.

2.1.2 Review of existing reports

The consultants were able to review the following reports.

- Mercer Report: Moving Kazakhstan Railways to a Market Economy.
- EBRD Report: Restructuring of Kazakh Temir Zholy (KTZ)
- EBRD Reports: Various
- Winner: Some Financial Details
- TRACECA: Forwarding Multi Modal Transport Systems on the TRACECA Route
- TRACECA: Rolling Stock Maintenance - Railways: Completion Report
- TRACECA: Regional Traffic Database and Forecasting Model
- TRACECA: Rail Maintenance Modules A&B - Draft Final Report
- TRACECA: Development of the Port in Baku: Phase III Report, Volume II
- TRACECA: Rail Maintenance Central Asia: Infrastructure II

Progress Report

- TRACECA: Inter-State Tariff and Timetable Progress Report
No.: I

2.1.3 EBRD investment proposals

The consultants are aware of the following investment proposals which are currently been discussed with various government departments and KTZ.

Improvement and adaptation of management tools :	\$20m
Improvement of track maintenance practice :	\$89m
Upgrading and adaptation of assets :	\$54m
Locomotive and wagon overhaul and maintenance :	\$59m
Upgrading of diesel locomotives and wagons :	\$58m
Labour productivity enhancement :	\$20m
Total :	\$300m

A more detailed breakdown of these proposals are given in Annex No 2



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2.1.4 Steering committee

A steering committee has been set up consisting of the following members.

Mr Segal	Ministry of Transport.
Mr Urazbekov	Ministry of Transport.
Mr Shneidmyuller	First Deputy General Director KTZ
Mr Altayev	Head of Main Economic Department.
Mr Waters	CIE Consult / SYSTRA

2.2. *Railway privatisation draft working paper*

At the request of the railway a draft working paper on RAILWAY PRIVATISATION was prepared. This is included in Annex No 3.

3. Project Planning

3.1 Introduction

- The present study is part of the TACIS programme for the Restructuring of Central Asian Railways.
- The project is financed by TACIS and is part of the technical assistance programme for the CIS states.
- The project was tendered in March 1997 and was awarded to CIE CONSULT/SYSTRA in July 1997. DE CONSULT act as sub-contractor for portion of the work.
- A draft final report will be presented at the end of November after which a joint meeting of representatives of the three main Central Asian States will be held either in Brussels or London.
- This project is part of the TACIS-TRACECA PROGRAMME for the restructuring of the railways in the central Asian states. The work is been carried out in close collaboration with the European Bank for Reconstruction and Development (EBRD).

The study also takes cognisance of previous The World Bank report carried out by Mercer Consultants, and various reports prepared by EBRD.

Special attention will be given to international traffic as this provides 40% of KTZ revenue. Relationships with adjoining railways are of vital importance to KTZ.

This study will supplement previous studies and the proposed business plan to be presented by the Winner team in September. It will spell out in some detail how efficiencies can be achieved. It is recognised that the restructuring process is moving very fast and the study must be robust enough to respond to rapid change. This is particularly so in relation to the possible privatisation of the railway or indeed certain elements of it. Indeed progress in this area has been impressive with a number of enterprises being privatised.

The object of this report is essentially to assist KTZ and the government in the detailed planning of restructuring to transform the railway into a commercially driven and self sustaining enterprise.

The consultants will also assist the railway in setting up a Restructuring Implementation Task Force which will give effect to the transition from the existing to the future organisation.

The consultants would like to thank the many people in the Ministry of Transport and KTZ who have been treated with great courtesy and kindness. The consultants have worked very closely with the European Bank for Reconstruction and Development who also provided office

accommodation during the earlier stages of the project. The consultants have had access to the latest information from the Winner team who are working on the business plan for the railways. They would also like to thank the staff of the TACIS office in Almaty who have been very helpful.

The consultants would also like to thank Kazakh Temir Zholy for currently providing office accommodation in their headquarters office and for the co-operation they have received since arriving in Almaty.

3.2 *Project approach*

In order to get a clear understanding of the railways their problems and aspirations interviews will continue to be carried out with key ministry and railway personnel. It has been agreed that railway counterpart staff will be nominated. This is important so that there can be a transfer of information and technology where appropriate. In essence the approach of the consultants will be very much a partnership approach.

On receipt of the necessary information (1) the problem will be defined (2) analysed (3) solutions developed. The next steps in these processes are to implement and finally to measure the progress. It is a fact that what can be measured gets done.

Each expert will analyse the problems within their own areas of responsibility and where there is overlapping with colleagues will discuss and reach agreement.

3.3 *Work plan*

The proposed timetable for the completion of the project is included in Annex No. 4. The team project manager, together with the other experts will return to Almaty at the end of September begin the next phase of the project. They will continue with the collection of information in their particular area of expertise. Although based in Almaty they will visit railway installations throughout the country. In this phase the team will collect further data on

- the national economy with particular reference to the transport sector,
- current organisation and staffing,
- railway financial performance and accounting procedures,
- costing systems,
- revenue protection,
- railway operations,
- rolling stock including maintenance,
- infrastructure including track maintenance,
- signal and communications,
- relationships with adjoining railways,
- proposed railway code,
- proposed institutional arrangements,

- MIS systems,
- environmental law,
- privatisation proposals,
- traffic patterns and forecasts,
- commercial evaluation of traffic,
- strategic investment programme.

The team will assess the information and prepare recommendations for discussion with the railway and the Ministry of Transport and Communication

The consultants will assist KTZ in the development of a Restructuring Implementation Task force. The draft final report will be available at the end of November after which a Regional Collaboration meeting will be held with heads of the three main Central Asian States railways and the relevant ministers responsible for policy making. This meeting will be held either in Brussels or in London.

3.4 Deliverables

- Comment on the legal framework within which the railways will operate in the future
- Outline of public service contracts
- Comment on the regulation of monopolies and price control
- Outline of relationship between the MoT and KTZ and any privatised railway company
- Corporatisation proposals for various elements of the railway
- Proposals for regulatory framework
- Organisational framework for the core KTZ railway
- Organisation of the regulatory body
- Identification of the data requirements for the control of various enterprises
- Comment on new accounting rules and procedures
- Current performance performance of the railway.
- Financial assessment of the railway
- Development of bartering arrangement
- Specification of software for infrastructure, operations, rolling stock, rolling stock, accounting and human resources.
- Comment on communications system.
- Comment on hardware.
- Recommendations for computer network.
- Traffic forecasts
- Traffic costing
- Commercial evaluation of traffics
- Review of railway operations
- Proposals for improved efficiency in railway operations

- Proposals for cost reductions in railway operations
- Comment on present timetable and possible revision of same.
- Vision of possible railway operation of the future.
- Viability of operating block trains for some commodities.
- Recommendations for improved maintenance procedures for locomotives, coaches and wagons
- Recommendations in relation to the number of locomotive depots
- Comment on investment proposals for locomotives and rolling stock
- Recommendations in relation to maintenance procedures
- Recommendations for improved efficiency in the maintenance and renewal of the infrastructure
- Recommendations for the mechanised maintenance of KTZ track
- Comment on possible privatisation of track maintenance and production facilities
- Review of human resources in KTZ
- Comment on training needs of KTZ staff
- Review of environmental law in Kazakhstan and its impact on the railways
- Comment on EBRD investment proposals
- Financial and economic assessment of EBRD investment proposals
- Development of draft working paper on Privatisation of the Railways

3.5 **Risks**

KTZ are progressing with their restructuring at a very fast pace. It could be that events may overtake some elements of the study. If that happens the emphasis of the study may have to change.

If the Kazakhstan were to decide to privatise before restructuring the emphasis may have to change to assisting to M O T and K T Z in creating various enterprises for privatisation.

There is a risk that if investment in the railways is not forthcoming in the foreseeable future further deterioration in the railway infrastructure will occur with consequential further reductions in traffic and revenues.



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4. Annexes



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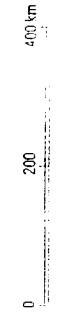
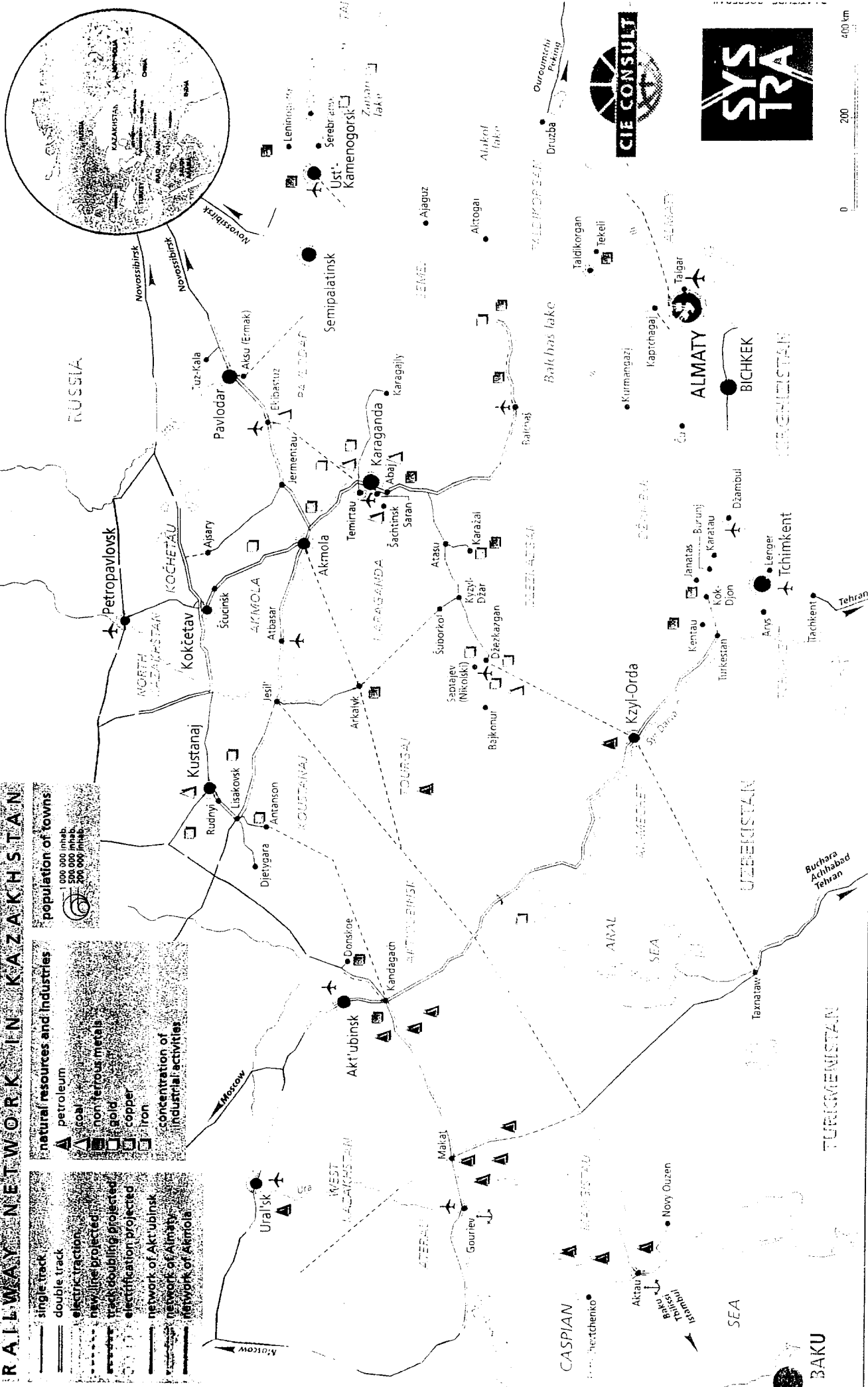
4.1 ***Annex N°1 - Map of Kazakhstan Railways***
showing old railway boundaries

RAILWAY NETWORK IN KAZAKHSTAN

- single track
- double track
- electric traction
- new line projected
- track doubling projected
- electrification projected
- network of Aktubinsk
- network of Almaty
- network of Akmola

- petroleum
- coal
- non ferrous metals
- gold
- copper
- iron
- concentration of industrial activities

- population of towns
1 000 000 inhab.
- 500 000 inhab.
- 200 000 inhab.



4.2 Annex N°2 - Capital expenditure programme of KTZ restructuring project

1. Improvement and adaptation of management tools	\$20 m
1.1. Central computer hardware and software and adaptation of telecom equipment.	
2. Improvement of track maintenance practices	\$89m
2.1 Three sets of mechanised maintenance equipment	\$78.5m
2.2 Modern track undercut and ballast cleaning equipment	\$4.0m
2.3 Rail grinding train	\$4.0m
2.4 Electronic track inspection car	\$2.5m
3. Upgrading and adaptation of assets	\$54.m
3.1 Complete the electrification of Otar-Almaty line	\$14.0m
3.2 One fixed and two light track maintenance sets	\$20.0m
3.3 Western design rail fastening for sleepers	\$5.0m
3.4. Materials for speed limit elimination on main tracks	\$15.0m
4. Locomotive and wagon overhaul and maintenance	\$59.0
4.1 Upgrading of diesel locomotive shops in Kasalinsk and Chu	\$32.0m
4.2 Upgrading of electric locomotive shop Atbasar	\$18.0m
4.3 Automated wheel reprofiling shop	\$9.0m
5. Upgrading of diesel locomotives and wagons	\$58.0m
5.1 Re-engining of 76 diesel locomotives 2TE10	\$53.0m
5.2 Tank wagon fleet upgrading	\$5.0m
6. Labour productivity enhancement	\$20.0m
6.1 Measures on enhancing labour productivity including labour attrition.	\$20.0m
Total	\$300m

4.3 Annex N°3 - Railways Privatisation - Draft Working Paper

4.3.1 Introduction

Many railways throughout the world are now looking at privatisation in one form or another. Successful privatisation's have been carried out in recent years in the United Kingdom, New Zealand, and Sweden. The United States of America have private railways for many years. A number of Swiss railways are currently operated by private companies.

Privatisation takes many forms. In some cases it means the total privatisation of the railway thus substituting a private monopoly for a state or public monopoly (New Zealand Railway).

The United Kingdom for instance has separated the ownership and use of railway assets. The infrastructure was vested in Railtrack (a private company).

Rolling stock was vested in separate companies (mostly financial) who would in turn lease them to operating companies.

The right to operate was licensed to private companies. These companies paid a fee to Railtrack for operating on the infrastructure. In cases where the government or local authorities wished to retain uneconomic routes for social reasons the operating companies are given grants. Maintenance related assets were vested with private companies who would in turn contract with Railtrack and owners of the rolling stock.

So there are many different models for privatisation ranging from total privatisation to privatisation of elements of the railway.

4.3.2 Competition

Privatisation brings with it an opportunity of introducing competition within the railways. Privatisation opportunities exist in the infrastructure for track maintenance, track renewal, concrete sleepers manufacture, rail welding, etc.

On the operation of train services, train operation , manning of stations, locomotive maintenance, carriage and wagon maintenance can be privatised. In considering privatisation the opportunity should not be missed to introduce competition on the railways.

4.3.3 Restructure before or after privatisation

This is a question that has to be addressed very carefully. If the restructuring takes place before there will be added value and the privatisation sale will be more attractive to private investors. The second option is to privatise before restructuring and down-sizing leaving it to private companies to carry out this. The uncertainty of this approach may make private investors very cautious. There is finally the political-social dimension in down-sizing at a very fast pace in particular locations.

4.3.4 The privatisation process

The privatisation of the railways has two main elements :

- 1) The legislative role to dismantle the present state railway system and develop new legislation to create new state and or private companies to operate the railways of the future.
- 2) The unbundling of the railways and the creation of a number of new private and perhaps state companies or a combination of both to provide competitive, reliable and cost effective railways for the future.

The legislative process is normally carried out by Government with the help of the railways and can run in parallel with the unbundling of the railways and the creation of new enterprises.

The reform process would involve the following steps :

a) Transport planning process

Define the passenger railway of the future i.e. number and frequency of services to various locations and operating characteristics (speed, timetable, scheduled stops etc.)

Anticipate demand for freight services so that adequate capacity will be available on the network.

Define the operating relationship between passenger and freight operations

b) Segmentation of railway into business units

Segment logically the railways into more focused business units e.g. mainline rail, suburban services , freight services, maintenance services. etc. as a pre-condition for further rationalisation and corporatisation.

c) Enact railway legislation

Enact legislation regulating railway activity in Kazakhstan. The legislation should support the privatisation.

d) Corporatisation

Corporatise the various units that may be available for privatisation identifying the precise assets and liabilities and contractual relationships.

e) Privatisise the business elements

Privatisise the business elements following the process set out below :

(Note: it is essential that legislation is enacted regulating railways in Kazakhstan. Without this legislation no change may be possible. The legislation should not create barriers to privatisation)

- 1) Prepare and information memorandum with an assessment of the condition of all assets (age condition etc.), business prospects, financial information and contracts.
- 2) Hold a public conference to explain to prospective companies what the process is about and advertise the process.

- 3) Invite tenders
- 4) Have tenderers conduct due diligence and submit technical proposals.
- 5) Short list 3 or 4 companies.
- 6) Negotiate or retender
- 7) Select successful tenderers

The approximate time scale for such a process would be as follows :

a)	Transportation Planning	6 months
b)	Create Business Units	3 months
c)	Rationalise (can run parallel with other processes)	2 years
d)	Corporatise	3 months
	1) Produce Information Memorandum	6 months
	2) Public conference	3 months
	3) Invite tenders	6 months
	4) Short list tenders	3 months
	5) Negotiate and accept tenders	6 months

TOTAL **36 months**

The United Kingdom took 5 years to privatise from inception to completion.

4.3.5 Legislative Process

This should be completed well within the time scale of the other elements of the privatisation. In the case of railways in Central Asia changes in ownership would probably have some of the following motives.

- a) fostering the downsizing and improving the efficiency of the operation
- b) ensuring continuity in delivery of needed passenger services
- c) improving customer services
- d) prevent monopoly situation
- e) ensure adequate financing and effective implementation of needed maintenance



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4.4 *Annex N°4 - Overall work plan*

TRACECA: CENTRAL ASIAN RAILWAYS RESTRUCTURING

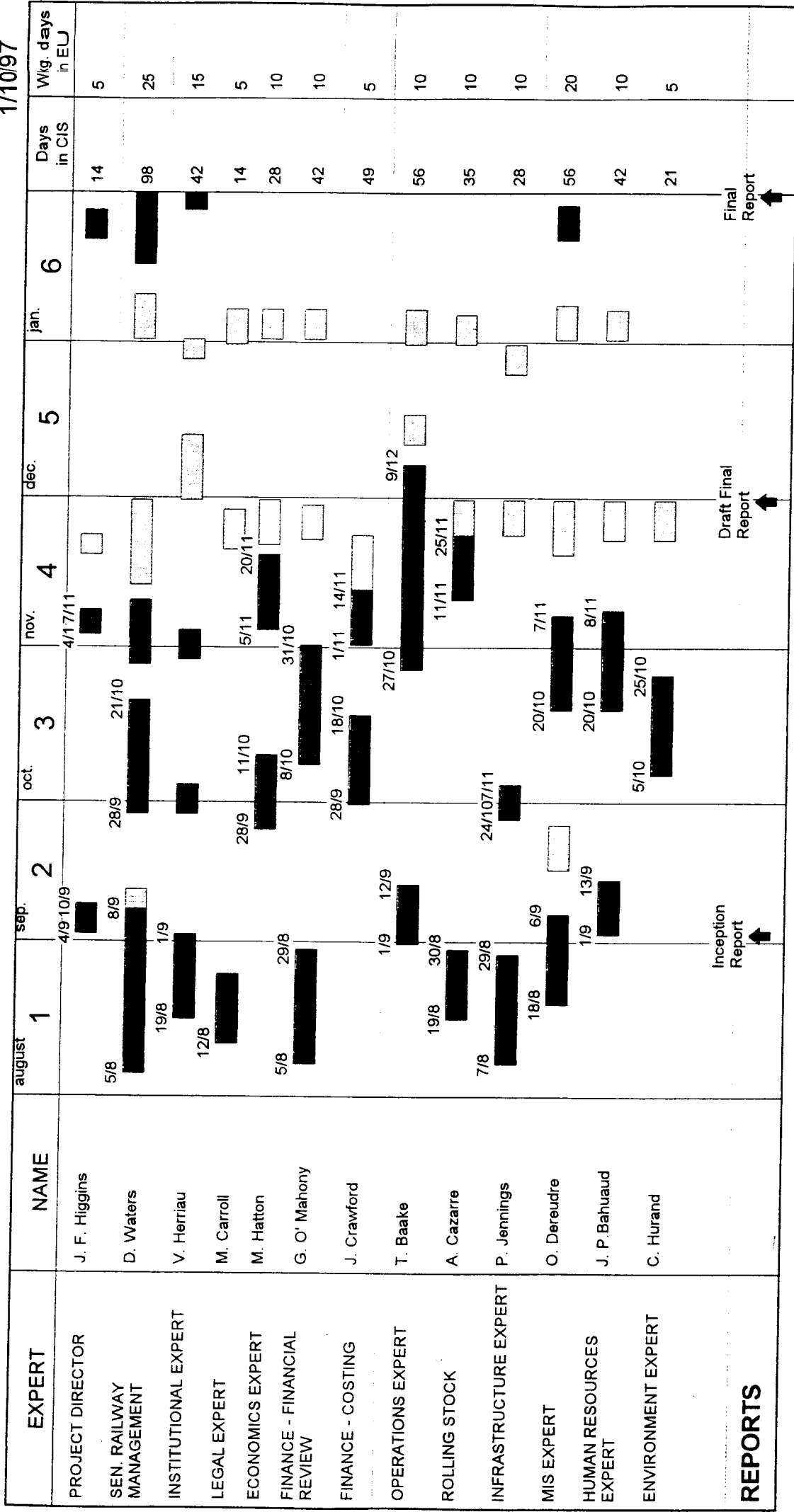
MODULE A: Kazakhstan Railway Restructuring Study

WORK PROGRAMME

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CIS - FIELD

EU