

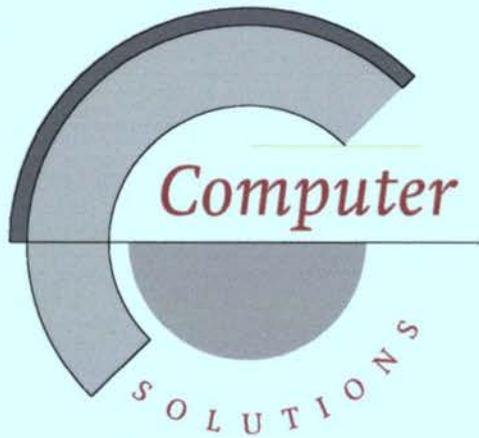
Copy of bid



TECHNICAL PROPOSAL

Project Title: Central Asian Road Border Crossings

Project N°: SCR-E/110622/C/SV/WW

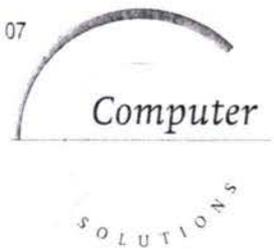


ANNEX A

ANNEX B

ANNEX C

COMPANY PROFILES



LETTER OF UNDERTAKING

We, the undersigned, being the authorised representative(s) acting for and on behalf of the company/companies indicated below, having read and understood the invitation to tender dossier, comprising the terms of reference, the draft contract and all annexes as listed in the invitation to tender, which from part of the terms and conditions of the contract:

- ♦ Acknowledge being in possession of the said documents;
- ♦ Confirm that the proposal has been drafted according to the guidelines received;
- ♦ Undertake to perform the contract in accordance with the terms and conditions of the contract; and
- ♦ Will remain bound by the tender submitted for 150 days from the date of deadline submission of tenders.

In the event of the contract being awarded to Computer Solutions / Tractebel Development Engineering / Parkman, it will be signed by:

Mr. L. Verheye
Director Computer Solutions BV

The contact person for the project		Bank details of the consortium	
Name	<i>Mr. L. Verheye</i>	Name of Bank	<i>Rabobank Breda</i>
Company	<i>Computer Solutions BV</i>	Address	<i>Markendaalseweg 73 4811 KB BREDA</i>
Address	<i>Takkebijsters 17G 4817 BL BREDA The Netherlands</i>		
		Name of account holder	<i>Computer Solutions BV</i>
		Account number	<i>10.46.69.853</i>
Telephone	<i>+31 76 520.24.05</i>	Sort code (SWIFT)	<i>RABONL2U</i>
Fax	<i>+31 76 520.24.07</i>		
Email	<i>luc.verheye@coso.nl</i>		

Date: 14 February 2001

Name of Company	Name of authorised person	Signature
Computer Solutions	Mr. Luc Verheye	

Computer Solutions B.V., Takkebijsters 17G, 4817 BL Breda, The Netherlands, tel (076) 520 24 05, fax (076) 520 24 07



LETTER OF UNDERTAKING

We, the undersigned, being the authorised representative(s) acting for and on behalf of the company/companies indicated below, having read and understood the invitation to tender dossier, comprising the terms of reference, the draft contract and all annexes as listed in the invitation to tender, which from part of the terms and conditions of the contract:

- Acknowledge being in possession of the said documents;
- Confirm that the proposal has been drafted according to the guidelines received;
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- Will remain bound by the tender submitted for 150 days from the date of deadline submission of tenders.

In the event of the contract being awarded to Computer Solutions / Tractebel Development Engineering / Parkman, it will be signed by:

Mr. L. Verheye
Director Computer Solutions BV

The contact person for this project		Bank details of the consortium	
Name	Mr. L. Verheye	Name of Bank	Rabobank Breda
Company	Computer Solutions BV	Address	Markendalseweg 73 4811 KB BREDA
Address	Takkebijsters 17G 4817 BL BREDA - The Netherlands	Name of account holder	Computer Solutions BV
Telephone	+31 76 520.24.05	Account number	10.48.69.853
Fax	+31 76 520.24.07	Sort code (SWIFT)	RABONL2U
Email	luc.verheye@coso.nl		

Date: 14 February 2001

Name of Company	Name of authorised person	Signature
Computer Solutions	Mr. Luc Verheye	
Tractebel Development Engineering	Mr. Ignace de Saint Moulin	
	Mr. Jacques Pepin	
Parkman	Mr. Ken Davies B.MATTE	

K.v.K. Breda: 20057706, Bank: 10 48 69 853 Rabobank Urenhout, BTW: NL008631071801

Transportation Division

avenue Ariane 7
B-1200 Brussels (Belgium)
Tel. + 32 2 773 75 11
Fax + 32 2 773 79 90

Sendersname : Jacques Pepin

Direct tel.: + 32 2 773 8089
Direct fax: + 32 2 773 7990

Vos réf.
Nos réf. L01-001

Tacis Procurement Unit
Mrs. Carla Osório,
Procurement Co-ordinator
Rue Montoyer, 31
B-1000 Bruxelles

1th February 2001

**Project : Central Asian Border Crossings,
SCR-E/110622/C/SV/WW**

Dear Mrs. Osório,

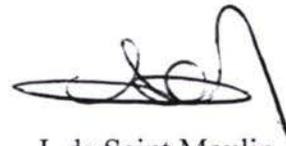
Tractebel Development Engineering is pleased to confirm that it will associate with Computer Solutions BV on the above project, to provide the consultancy services described in our Consortium's Tender document.

Computer Solutions BV will be the leader company.

Yours sincerely,



J. Pepin
Project Director



I. de Saint Moulin
Transport Division Manager

Tractebel Development
Engineering**Transportation Division**

avenue Ariane 7
B-1200 Brussels (Belgium)
Tel. + 32 2 773 75 11
Fax - 32 2 773 79 90

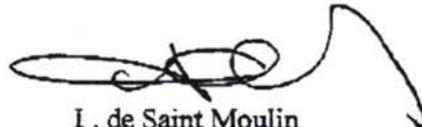
Subject : Central Asian Border Crossings
SCR-E/110622/C/SV/WW

STATEMENT OF INTENT

We undersigned hereby confirm our company's commitment to provide the services in conformity with this tender dossier, and to be jointly and severally bound by the tender.



J. Pepin
Projects Director



I. de Saint Moulin
Transportation Division Manager



NIIT

76/109, Abai av., Almaty, 480057, Republic of Kazakhstan Phone: (3272) 426569 Fax: (3272) 58 24 49
E-mail: niit@mailbox.kz

The association of;
Computer Solutions b.v.,
Tractebel Development Engineering s.a.

Dear Sir,

TACIS Project: Central Asian Border Crossings

As you well know from our collaboration on previous projects funded by international agencies, NIIT is a long-established Institute providing research, planning, design, and management consultancy services in the transport sector.

Our Institute is now very pleased to support your tender for the subject project. We can offer specific skills in the development of transport related software and computer systems, as well as considerable management experience in the co-ordination of regional projects.

Our staff includes the following highly qualified and experienced specialists, who could be made available to participate in your project Team:

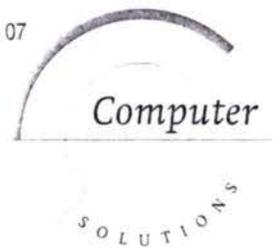
Murat BEKMAGAMBETOV (General Director)
Edward KAPLAN (Deputy Director)
Gulnara BEKMAGAMBETOVA
Alexander BOGDANCHIKOV
Bolat AI.DABERGENOV
Tatayana MELSITOVA
Sofya SULEIMENOVA
Alexei IVANOV
Igor SOBOLEV

We look forward to working with you.

Yours sincerely,

Dr. Murat Bekmagambetov
General Director, NIIT





**PROJECT: CENTRAL ASIAN BORDER CROSSINGS
SCR-R/110622/C/SV/WW**

CERTIFICATE

I, LUC VERHEYE, director of Computer Solutions BV, certify on behalf of the Company that the Company is not in one of the following situations:

- ♦ Bankrupt of being wound up, its affairs are being administered by the court, it has entered into an arrangement with creditors, has suspended business or any analogous situation arising from a similar procedure under national laws and regulations;
- ♦ Subject to proceedings for a declaration of bankruptcy, for an order for compulsory winding-up or administration by the court or for an arrangement with creditors or any other similar proceedings under national laws or regulations;
- ♦ Convicted of an offence concerning professional conduct by a judgment which has the force of 'res judicata';
- ♦ Not fulfilled obligations relating to the payment of social security contributions in accordance with the legal provisions of the country where it is established;
- ♦ Not fulfilled obligations relating to the payment of taxes in accordance with the legal provisions of the country where it is established.

Signed
Computer Solutions BV

Luc Verheye
Director.

A handwritten signature in black ink, appearing to read "Luc Verheye", is written over a horizontal line.



KAMER VAN KOOPHANDEL
WEST-BRABANT

File number: 20057708

Page 00001

English translation of an extract from the commercial register of the
Chamber of Commerce and Industries for West-Brabant

Legal person:

Legal form :Besloten Vennootschap (Private Limited Liability Company)
Name :Computer Solutions B.V.
Statutory seat :Bavel
First registration of legal person in a commercial register :20-11-1990
Incorporation deed :15-11-1990
Authorized capital :NLG 200.000,00
(EUR 90.756,04)
Issued capital :NLG 80.000,00
(EUR 36.302,42)
Paid up capital :NLG 80.000,00
(EUR 36.302,42)

Undertaking:

Tradename(s) :Computer Solutions B.V.
Address :Takkebijsters 17 G, 4817BL Breda
Date of establishment :09-06-1989
The private company conducts the undertaking since :15-11-1990
Description of business conducted :See Dutch extract
employees :8

Single shareholder:

Name :Verheye, Luc Leon / 6
Date and place of birth :02-07-1953, Kortrijk, Belgium
Address :Douglaslaan 33 /1, Kapellen 2950, Belgium
Single shareholder since :31-07-1998

Director(s):

Name :Verheye, Luc Leon / 5
Date and place of birth :02-07-1953, Kortrijk, Belgium
Address :Douglaslaan 33 /1, Kapellen 2950, Belgium
Date of entry into office :01-03-1996

22,00 14-02-2001

Page 00002 follows.



File number: 20057708

Page 00002

Title	:Direkteur
Powers	:Solely/independently authorised
Date of (present) representative authority	:01-03-1996

Authorized signatory(signatories):

Name	:De Brauwer-Kennis, Wilhelmina Maria Alphonsa / 7
Date and place of birth	:02-10-1959, Breda
Address	:Oekelsebaan 39, 4881NE Zundert
Function and entry into office	:Holder of power of attorney for signature, 20-10-2000
Powers	:Full power of attorney
Commencement (present) power of attorney	:20-10-2000

Issued by the chamber of commerce

26,00

Breda, 14-02-2001



M. Heijer

LEGES FL. 196
A no.:
REF 10/2002



KAMER VAN KOOPHANDEL
WEST-BRABANT

Dossiernummer: 20057708

Blad 00001

Uittreksel uit het handelsregister van de Kamer van Koophandel en Fabrieken voor West-Brabant

Rechtspersoon:

Rechtsvorm : Besloten vennootschap

Naam : Computer Solutions B.V.

Statutaire zetel : Bavel

Eerste inschrijving rechts-
persoon in enig handels-
register : 20-11-1990

Akte van oprichting : 15-11-1990

Maatschappelijk kapitaal : NLG 200.000,00

(EUR 90.756,04)

Geplaatst kapitaal : NLG 80.000,00

(EUR 36.302,42)

Gestort kapitaal : NLG 80.000,00

(EUR 36.302,42)

Onderneming:

Handelsna(a)m(en) : Computer Solutions B.V.

Adres : Takkebijsters 17 G, 4817BL Breda

Datum vestiging : 09-06-1989

De besloten vennootschap
drijft de onderneming sinds : 15-11-1990

Bedrijfsomschrijving : De import, ontwikkeling en verkoop van hard- en
software en supplies, alles in de meest
uitgebreide betekenis genomen.
Voorts het oprichten, verwerven van, het
deelnemen in, het samenwerken met en het voeren
van de directie over andere ondernemingen, ...
alsmede het (doen) financieren, ook d.m.v. het
stellen van zekerheden, van andere
ondernemingen etc.

Werkzame personen : 8

Enig aandeelhouder:

Naam : Verheye, Luc Leon / 6

Geboortedatum en -plaats : 02-07-1953, Kortrijk, België

Adres : Douglaslaan 33 /1, Kapellen 2950, België

Enig aandeelhouder sedert : 31-07-1998

Bestuurder(s):

22,94 14-02-2001

Blad 00002 volgt.



KAMER VAN KOOPHANDEL
WEST-BRABANT

Dossiernummer: 20057708

Blad 00002

Naam	:Verheye, Luc Leon / 5
Geboortedatum en -plaats	:02-07-1953, Kortrijk, België
Adres	:Douglaslaan 33 /1, Kapellen 2950, België
Infunctietreding	:01-03-1996
Titel	:Direkteur
Bevoegdheid	:Alleen/zelfstandig bevoegd
Aanvang (huidige) vertegenwoordigingsbevoegdheid	:01-03-1996

Gevolmachtigde(n) :

Naam	:De Brauwer-Kennis, Wilhelmina Maria Alphonsa / 7
Geboortedatum en -plaats	:02-10-1959, Breda
Adres	:Oekelsebaan 39, 4881NE Zundert
Functie en infunctietreding	:Procuratiehouder, 20-10-2000
Bevoegdheid	:Volledige volmacht
Aanvang (huidige) volmacht	:20-10-2000

Alleen geldig indien door de kamer voorzien van een ondertekening.

30,94

Breda, 14-02-2001

Voor uittreksel



M. Heyer

LEGES FL. 18, -
A no.:
REF 20/20022.

Transportation Division

avenue Ariane 7
B-1200 Brussels (Belgium)
Tel. + 32 2 773 75 11
Fax + 32 2 773 79 90

**Project : Central Asian Border Crossings
SCR-E/110622/C/SV/WW**

CERTIFICATE

We hereby certify that :

- a) we are not bankrupt or being wound up, our affairs are not being administrated by the court, we are not entered into an arrangement with creditors, we have not suspended business activities or are not in any analogue situation arising from a similar procedure under national laws or and regulations;
- b) we are not subject of proceedings for a declaration of bankruptcy for an order for compulsory winding-up or administration by the court or for an arrangement with creditors or of any other similar proceedings under national laws or regulations;
- c) we have not been convicted of an offence concerning professional conduct by a judgement which has the force of "res judicata";
- d) we have fulfilled obligations relating to the payment of social security contributions in accordance with the legal provisions of the country where they are established;
- e) we have fulfilled obligations relating to the payment of taxes in accordance with the legal provisions of the country where they are established.



J. Pepin
Project Director



I. de Saint Moulin
Director of Transport Division'



UNITED KINGDOM

- Belfast
- Birmingham
- Bristol
- Edinburgh
- Ellesmere Port
- Liverpool
- London
- Manchester
- Newcastle
- Peterborough
- Sidcup

Your Reference

European Commission
for projects financed by TACIS funds

Our Reference

26 January 2001 Date

E-mail

Direct Dial

REGIONS OFFICES

- Austria
- Botswana
- Ethiopia
- Hungary
- Ireland
- Kenya
- Namibia
- Nigeria
- Pakistan
- South Africa
- U.A.E.
- Vietnam

CENTRAL ASIAN BORDER CROSSINGS

I, RICHARD ALEC PREECE, the Company Secretary of Parkman Limited, certify on behalf of the Company that the Company is not in one of the following situations:

- (a) bankrupt or being wound up, its affairs are being administered by the court, it has entered into an arrangement with creditors, has suspended business or any analogous situation arising from a similar procedure under national laws and regulations;
- (b) subject to proceedings for a declaration of bankruptcy, for an order for compulsory winding-up or administration by the court or for an arrangement with creditors or any other similar proceedings under national laws or regulations;
- (c) convicted of an offence concerning professional conduct by a judgement which has the force of 'res judicata';
- (d) not fulfilled obligations relating to the payment of social security contributions in accordance with the legal provisions of the country where it is established;
- (e) not fulfilled obligations relating to the payment of taxes in accordance with the legal provisions of the country where it is established.

Signed.....

Parkman Limited
Registered in England
No. 2946586

a Parkman Group
Company

Registered Office:
Cunard Building,
Liverpool L3 1ES



Certificate No. FS 15024



Cunard Building, Liverpool L3 1ES
Tel: 0151 242 7777 Fax: 0151 242 7700

Project: Central Asian Border Crossings
SCR-R/110622/C/SV/WW

CERTIFICATE

I, Luc Verheye, director of Computer Solutions B.V., certify on behalf of the company that the company is not in one of the following situations:

- ♦ Bankrupt or being wound up, its affairs are being administered by the court, it has entered into an arrangement with creditors, has suspended business or any analogous situation arising from a similar procedure under national laws and regulations;
- ♦ Subject to proceedings for a declaration of bankruptcy, for an order for compulsory winding-up or administration by the court or for an arrangement with creditors or any other similar proceedings under national laws or regulations;
- ♦ Convicted of an offence concerning professional conduct by a judgment which has the force of 'res judicata';
- ♦ Not fulfilled obligations relating to the payment of social security contributions in accordance with the legal provisions of the country where it is established;
- ♦ Not fulfilled obligations relating to the payment of taxes in accordance with the legal provisions of the country where it is established.

Signed
Computer Solutions B.V.

Luc Verheye
Director.



I certify that this is a
true copy of the original
document

humbley

Company Secretary

26.01.01

**CERTIFICATE OF INCORPORATION
OF A PRIVATE LIMITED COMPANY**

Company No. 2946586

The Registrar of Companies for England and Wales hereby certifies that
AGENTMID LIMITED

is this day incorporated under the Companies Act 1985 as a private
company and that the company is limited.

Given at Companies House, Cardiff, the 7th July 1994

M. Lewis
M.LEWIS

For the Registrar of Companies



C O M P A N I E S H O U S E

HC007A



I certify that this is a true
copy of the original document

Company Secretary

26.01.01

**CERTIFICATE OF INCORPORATION
ON CHANGE OF NAME**

Company No. 2946586

The Registrar of Companies for England and Wales hereby certifies that
AGENTMID LIMITED

having by special resolution changed its name, is now incorporated
under the name of
PARKMAN LIMITED

Given at Companies House, Cardiff, the 7th September 1994

P. BEVAN

For the Registrar of Companies



C O M P A N I E S H O U S E

HC006A

Track Record & Qualifications of the Company

Name of company: **Parkman Limited**

a. List of selected references of relevance for the project in question.

VIETNAM – WORLD BANK – 1998 –ongoing

A World Bank Technical Assistance Project for the Vietnam Road Administration involving the setting up of a highway maintenance management system for roads and bridges including the preparation of annual budgets.

SLOVAKIA – DFID (BRITISH GOVERNMENT) – 1997-1999

Development of a national highway investment planning system, covering financial planning (investment and maintenance), technical standards, road and bridge management systems, investment appraisal and Management Information Systems.

UNITED KINGDOM – ROAD MANAGEMENT GROUP – 1994 -ongoing

Principal advisors for the development of an operations and management strategy for Design-Build-Fund-Operate road concessions on four British motorways.

ARMENIA -WORLD BANK - 1998/99

Road Rehabilitation Project - Condition surveys by visual inspection & mechanical testing of 860km of National Roads, prioritisation of road rehabilitation work over two seasons using HDM III, production of design, budgets and tender documents.

CENTRAL ASIA & CAUCASUS - TACIS - 1997-1999

Traceca : Road Maintenance Project - Implementation of PMS and BMS techniques and systems in 3 Caucasus states and 5 Central Asian Republics. In 5 countries the production of Feasibility Studies into the rehabilitation of major sections of the Silk Route Corridor.

MACEDONIA – WORLD BANK (IBRD) – 1997

Introduction by technology transfer of a Pavement Management System for use in the maintenance of the national road network of Macedonia, including an assessment of maintenance practices and the use of demonstration projects in the economic evaluation of two national road schemes.

UK HIGHWAYS AGENCY – 1998-date Chris Britton Consultancy

Pavement & Maintenance Advisors to Area 21 Motorway and Trunk Road Management Commission

UK HIGHWAYS AGENCY 1999-date Chris Britton Consultancy

National Pavement Management System (UKPMS), independent system testing, and advisors to Dept. of Transport on Performance Indicators .

ALBANIA - PHARE. 1998-99

N.-S. Corridor : Rrogozhina-Fier-Vlora Highway Feasibility Study, detailed design & preparation of tender documents for reconstruction of 65km. of the principal North-South highway corridor between the capital Tirana and the Adriatic port of Vlore.

EUROPEAN UNION - TACIS

Technical Assistance to Central Asia- TRACECA

TRADE AND TRANSPORT SECTORS

Terms of Reference

for

**CENTRAL ASIAN ROAD BORDER CROSSING
(incl. ROAD FEASIBILITY STUDY)**

Final Recipient :

**TRACECA Region Cabinet of Ministers,
Ministries of Transport and
Customs Authorities**

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 - 1.2. *Problems to be Addressed*
 - 1.3. *Co-ordination with Other Donors*
- 2. Rationale and Objectives**
 - 2.1. *Overall Objectives*
 - 2.2. *Project Purpose*
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- 4. Main Components**
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 - 4.1.1. *Tasks*
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- 7. Environmental Impact**
- 8. Monitoring and Evaluation**

1. BACKGROUND

1.1. Needs of Beneficiary

The beneficiaries of the project are:

- Ministries of Transport of Kazakhstan, Kyrgyzstan
- Customs Authorities of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
- Cabinet of Ministers and Road Department of Uzbekistan

The transport and communications infrastructure in the Central Asian Republics was developed as part of the large, inward looking Soviet transport system. From the standpoint of Central Asia, the system was designed to facilitate relations and domestic trade with the northern and European part of the FSU. Trade links to the South and East were quite minimal, and there were no customs controls at internal border crossings.

TRACECA has already completed projects and plans others to improve this situation. These initiatives include the completed Trade Facilitation project, and two projects for the establishment of an Intergovernmental Joint Committee for the Implementation of the TRACECA Multi-Lateral Agreement (IGC-MLA), and to improve the workings of the TIR system with the International Road Union (IRU).

The Asian Development Bank (ADB) is equally concerned that non-physical barriers to trade, including inefficient customs systems, can stifle regional development. The ADB is presently developing a project for rehabilitation of the Almaty-Bishkek road, which is the busiest interstate road link on the Central Asia section of the TRACECA route. The estimated project cost will be 100 MUSD in Kazakhstan, and 6,3 MUSD in Kyrgyzstan. For this project the ADB is insisting that the infrastructure investment project includes measures to reduce border crossing delays. Cognisant of the work that TRACECA has done in this domain, the ADB has invited TRACECA to participate in the improvement of the border crossing facilities part of their project, and TRACECA has agreed to this. TRACECA grant financing will reduce the loan burdens of the roads rehabilitation project on both countries concerned, and will provide the opportunity to integrate these facilities into a more comprehensive regional movement for trade facilitation improvements. Such integration will be promoted at policy level through the IGC-MLA, as well as "on the ground", through this present project.

The ADB is insisting on signature and implementation of a "Cross Border Agreement", regulating traffic between Kyrgyzstan and Kazakhstan. The Almaty-Bishkek Road Rehabilitation loan disbursement is linked to the CBA. The objectives and terms of the Cross Border agreement are generally compatible with the TRACECA MLA.

It would in fact be technically logical to extend the computerisation of the border crossing procedures as widely as possible. Software systems developed and implemented by certain EU member states, by UNCTAD, and by the IRU all allow integration.

No beneficiary country to date has declared and held to a strong commitment to implement an international off-the-shelf software product for customs system management such as ASYCUDA or SOFIX. Plans for regional integration are still more limited.

Physical infrastructure at the relatively new border crossings is of varied quality. Typically the existing facilities have been adapted from other uses, or hastily constructed. An exception is Uzbekistan, where quite substantial works have been carried out to establish some border posts.

In practice TRACECA road traffic enters Central Asia through the Port of Turkmenbashi. Most traffic is destined for the several economically active and populous cities of Southern Uzbekistan, Bishkek in Kyrgyzstan, and Chimkent, Taras and Almaty in Southern Kazakhstan. Some traffic deviates towards Khojent or Dushanbe in Tajikistan, and Osh in Southern Kyrgyzstan.

The important Central Asian TRACECA road border crossings are the Port of Turkmenbashi, Turkmenistan/Uzbekistan (Charzou), Kazakhstan/Kyrgyzstan, and Kyrgyzstan/ Kazakhstan (Bishkek). An Uzbek/ Kyrgyz border crossing close to Osh, and the Uzbek/Tajik border crossing serving Khojent should also be considered, as well as possibly others.

The inclusion by the ADB of the border crossing on the Almaty-Bishkek road highlights the need for improvements at these points as a condition for infrastructure investments to be made. Real improvements achieved by beneficiary states with TRACECA assistance at other border crossings would obviously facilitate further investment. TRACECA participation will furthermore provide the opportunity for designing and specifying the systems to be compatible with a broader regional concept for freight clearance procedures at border crossings, or elsewhere.

With the same objective Uzbekistan plans to upgrade the TRACECA roads on its territory, which will be about 1500 km long ("Uzbek Corridor"). It will include rehabilitation of the existing national roads as well as some new construction. The Uzbek Corridor will connect Uzbekistan to Europe via Kazakhstan in the north-west and Turkmenistan in the south-west and to China and Far East via Kyrgyzstan in the east.

The road network in Uzbekistan comprises about 43,500 km of roads, of which 96 per cent are paved. However, the condition of the roads is far from satisfactory and is deteriorating rapidly. The Road Agency, Uzavtoyol, is responsible for public roads and highways, while Uzavtotrans controls the state-owned entities involved in road transport such as the transport companies. Uzbektranstroy and Uzvodstroy are state-owned contractors, which carry out the construction work in the transport sector. They all report to the Cabinet of Ministers.

1.2. Problems to be Addressed

Presently delays at border crossings and inland clearance terminals for road freight transporters can be long. Such delays threaten to eliminate the time gains achieved by improved road infrastructure.

Telecommunications links at border crossings are mostly weak, particularly for supporting data interchanges. These impact on the efficiency of all customs procedures and roles.

A lack of equipment and in particular automated data processing equipment both at the border crossings, the inland regional centres, and the central customs agencies, aggravates the problem.

The Government of Uzbekistan intends to upgrade the Uzbek section of the TRACECA corridor route. This is consistent with the objective of the European Bank for Reconstruction and Development (EBRD) in its Strategy for Uzbekistan to develop the transport sector, in recognition of the land locked nature of the Central Asia region and the need to establish efficient trade routes to international markets. In response to The Uzbek Government request, the Bank has agreed to cooperate with the State Road Agency, Uzavtoyol and the Road Board in preparing an investment which will facilitate and support the improvement of the road network in Uzbekistan. A pre-feasibility study has been carried out to identify priority road sections for rehabilitation between Tachkent (Uzbekistan) and Osh (Kyrgyzstan). The Government of Uzbekistan now wishes to appoint Contractors to undertake a feasibility study for the selected road, followed by detailed engineering design and the preparation of tender documents.

1.3. Co-ordination with Other Donors and Other Projects

1.3.1 Other TACIS actions

Several relevant TACIS projects are related to this one, and should be referred to during the course of implementation. For the purposes of preparing technical proposals for this project, essential details are provided hereafter.

'EUROCUSTOMS' TACIS Team (the "Customs 2 Report" Appendix C provides a synopsis of actions under the project). Specialist know-how transfer, in the fields and forms listed below, has comprised the major part of this programme;

- Risk Assessment
- Harmonised System, Tariff and Valuation Methods
- Legislation and Codes
- Dog Training
- Study tours to EU and familiarisation with EU methods

TRACECA Project 'Trade Facilitation'

Several comprehensive technical deliverables were issued:

Computer Systems Report dated November 1996. Recommendations and notes include;

- Reference to a certain previous "ERMIS" Report on computer systems in the CIS, which does not appear to be available.

- Inadequate power and telecommunications systems severely inhibit customs operations and the implementation of automation by computerisation. Radio modems were recommended for data transfers to and from remote locations with poor telecommunications lines
- ASYCUDA and SOFIX are frequently mentioned. ASYCUDA is recommended for implementation (though according to an independent expert's verbal report, at least one EC/Phare well-funded action to promote ASYCUDA has not been successful). SOFIX was seriously considered by authorities in Kyrgyzstan and Turkmenistan, but neither decided to implement. It may be assumed that the implementation of a full national computerised customs system is well beyond the scope of this present project.
- Computers were used by customs services mostly for statistical and word processing.
- The level of computerisation varies quite considerably from country to country
- System architecture should be based on the capital city, then extended to regional and border post level.
- Input to computer systems should be made at the earliest possible stage in processing a consignment
- Input by traders and declarant companies is encouraged
- Within the region, use of standard customs documents is inconsistent
- A National Trade Data Transfer System should be an ultimate goal
- Greater awareness of computerisation should be promoted within customs services

Customs Border Post Report, October 1996;

- Notes that poor office equipment is a constraint on good operating procedures
- Recommends that computers and printers be supplied at all major crossings, and that all officers have basic training and keyboard skills
- Reiterates the problem of basic communications at border crossings, and recommends the installation of satellite phone systems and facsimile machines
- Recommends that all border crossings should be equipped with a stand-by generator
- Recognises the need for control detection and testing equipment, mentioning end-scopes, drug testing kits and Geiger counters, and training in the use and maintenance of such equipment

Trade Documents and Customs Procedures Report recommends use of UN trade documents.

TRACECA Project 'International Road Transport Transit Facilitation'

This project started in the second half of 1999. It will cover training in road freight transport operator licensing and will provide both training and equipment for operation of the TIR system. Beneficiaries are the national road freight transport associations, and the customs committees. The project was proposed by the IRU, and will be run in collaboration with them. This present project must ensure an efficient interface between the TIR/SAFETIR systems, where installed or being installed.

TRACECA Project 'Road Maintenance'

Several IFIs are planning major investments in roads, so the project focus was to sustain existing programmes and to encourage further IFI interest. The project carried out investigation at pre-feasibility level on the impact of new or much improved road. Module E « Pre-feasibility » led to EC National project in Kyrgyzstan for rehabilitation of corridor Uzbekistan-Kyrgyzstan-China.

Uzbekistan Road Sector Development Project - Project Preparation.

This is a pre-feasibility study of the road network in Uzbekistan carried out under EBRD financing to recommend priority developments. The selection of the road rehabilitation covered by these Terms of Reference is based on the conclusions of this study.

1.3.2 Asian Development Bank/European Bank for Reconstruction and Development

As noted in a previous section, this project originates in part from a request by the ADB to TRACECA to participate in the rehabilitation of the Almaty-Bishkek road and by The EBRD to TRACECA to participate in the rehabilitation

of the Tachkent-Osh road. The engagement of TRACECA as a participant in the ADB and EBRD roads rehabilitation projects is defined by these TOR.

EBRD has been working since June 2000 on the Project preparation and will finance within the Bank's Tacis Transport Framework Agreement a pre-feasibility study for the Uzbek road project.

TRACECA has collaborated closely with the two other donors named, particularly on issues of regional trade facilitation. The project Contractor must be expected to liaise with those banks' officers during execution of the project.

2. RATIONALE AND OBJECTIVES

2.1. Overall Objectives

The overall objectives of the project are to improve the conditions for road transport on the most heavily trafficked section of the TRACECA route, in Central Asia, concentrating on the road border crossing facilities and associated inland functions.

For Module B, this will be achieved by the rehabilitation of the "Selected Road(s)", on the basis of the recommendations of the pre-feasibility study. Specifically, the Contractor is required to:

- (i) determine the rehabilitation works needed to extend the useful life of the road for the most economic number of years, taking the existing and forecast traffic loads into account, and
- (ii) prepare detailed engineering designs and tender documents for the rehabilitation and assist The Uzbek Government in the tendering procedures.

2.2. Project Purpose

The project has two Modules :

The first Module (A) is principally for the supply of border crossing equipment, but for completeness and integration, will include necessary design and training components associated with the facilities. For promotion of, and conformity with a harmonious regional transport policy environment, the project will be linked to the IGC-MLA. The project responds to the ADB request for participation in the Almaty-Bishkek road rehabilitation. This purpose is enlarged to involve the other Central Asia TRACECA states, in the interests of regional cohesion.

The project is not concerned with physical infrastructure. Equipment is to be installed in existing facilities or new facilities supplied by others. The functionality of the systems may require equipment to be installed at the border crossings, at busy inland terminals, and in the customs services central data-processing facilities. The general recommendations of previous projects were to reduce the number of activities carried out at the border crossings.

The sub-objectives of the project are:

- conceptual design of a flexible, regionally integrated, modular system for eventual full automation of the beneficiary customs services
- schematic and detailed design and specification of pilot modules for implementation within the project
- provision, installation and commissioning of the necessary IT and telecommunications equipment to implement the pilot system
- provision of basic enforcement equipment such as drugs kits and infra-red document control devices
- training, and maintenance of the system

The functions and characteristics of the fully automated systems, as expressed by beneficiaries will include:

- comprehensive and reliable statistical services

- automated issue of documents, general reduction of paper work, and acceleration of all processing
- improved recognition of illicit goods
- improved valuation of goods and revenue collection
- processes to assist in reduction of fraud
- centralised accounting of customs revenues
- support to non-tariff related controls such as licences and quotas
- general management of the customs service
- improved communications links both between customs posts, management services and other organisations such as freight forwarders and customs agents
- general enhancement of the service to clients
- interfaces with other services related to border posts, such as security and immigration control
- data formats clearly defined to allow easy interface with divers external users (eg. Direct Trader Input, or DTT), and for regional interchanges
- full protection from illicit use and access to the system
- low maintenance requirements
- reliable and robust, with technical back-up and protection systems in the case of partial failure
- flexibility in adaptation to possible future changes in legislation, and organisation of the customs service, preferably without the need for intervention by foreign consultants
- evolutive, open and flexible for extension on a modular basis
- maximum clarity of the system design and documentation, to allow easy comprehension and accessibility by local IT specialists
- fully supportive to the implementation of the TRACECA Multi-Lateral Agreement and the ADB Cross Border Agreement

The second Module (B) is the Feasibility Study (including tender documents) for the selected road(s) on the segment Tachkent-Osh .The study will carry out an investigation and design of the upgrading and appropriate pavement strengthening, improvement and rehabilitation works needed to extend the useful life of the road for the most economic number of years, taking the existing and forecast traffic loads into account.

For the road section agreed between EBRD and the Uzbek Governement (segment of the road Tachkent-Osh) it will be required to produce the detailed working project with the scope of work, specification and cost estimates for the construction(+/-5%) including Tender documents.

Surveys and topographic investigations of the road section should be carried out under the technical category required.

Contractor shall carry out :

- Identification of IRR.
- Training of local staff in update survey methods.
- While carrying out investigations and preparing of deliverables required for the project, the appointed Contractor will be required to co-operate closely with local consulting organisations and EBRD.
- economic and technical studies for the remedial measures to be taken and the optimal allocation of the planned investments on the road links ;
- detailed field investigations of soils and materials, of the residual strength of the pavements, of road geometry etc. ;
- surveys of structures including bridges, culverts, retaining walls, erosion protection works etc. ;
- traffic surveys, including traffic counts at several locations and origin-destination surveys;

- detailed engineering design of proposed upgrading, rehabilitation, reinforcement and realignments, in accordance with the preliminary technical and economic indications for the allocation of the loan funds ;
- preparation of drawings, bills of quantities and specifications, for the eventual execution of the works by international competitive bidding ;
- cost estimates (+/- 5%)
- environmental impact assessment ;
- division of the proposed works into appropriate contractual packages and preparation of pre-qualification and bidding documents, in conformity with the procurement procedures of the financial institutions involved.

While carrying out the studies and preparing the deliverables required for the project, the appointed Contractor will be required, in partnership with local design entity, to familiarise them with the methodology of such studies. Specific training components will be foreseen within the project to ensure a maximum practicable degree of know-how transfer.

2.3 Expected Results

The project should:

- reduce delays for traffic at border crossings
- reduce fraud
- reduce the passage of illicit goods
- improve the quality of cross-border trade statistics
- improve the efficiency of customs service operations
- improve awareness of the advantages and limitations of computerisation to customs service operations
- produce an agreement at expert level on regional interfaces for national customs computerised systems
- promote regional trade integration

For the Module B, the assignment is to be carried out in two phases. Phase 1 will comprise the data collection, engineering, economic, environmental and feasibility studies necessary to meet the first objective of defining the rehabilitation works and will be concluded with a Feasibility Report. Phase 2 will comprise the detailed engineering design and preparation of tender documents.

Commencement of Phase 2 will be conditional on acceptance of the recommendations of the Feasibility Report by the Client and the Bank. Should the Contractor wish to use the period between submission and acceptance of the Feasibility Report to carry out any additional survey work necessary for the detailed engineering design, this must be made clear in his Works Programme.

2.4 Contract extension

The European Commission may, at its own discretion, extend the project in duration and/or scope, subject to the availability of funding. Any subsequent extension of the contract would be subject to satisfactory performance by the Contractor. This shall be judged, in particular, in terms of the progress towards the achievement of the project purpose, and the delivery of the anticipated results. The intervention of events outside the Contractor's control shall also be taken into consideration.

3. RISKS AND ASSUMPTIONS

Computerisation and other equipment supplies will not in themselves lead to reduced border crossing delays. Off-the-shelf customs software systems have a chequered reputation. Risks of such systems are perceived as:

- Lack of training materials, maintenance and consultancy assistance in the Russian or local languages

- Lack of local representation and support
- The daunting scale of the organisational transformations necessary to implement a full national off-the-shelf IT based system
- Lack of flexibility and possibilities for the agencies concerned to adapt the system to their own particular needs

The assumed advantages of such systems are international standardisation, and avoidance of “re-inventing the wheel”.

The assumption of this project is that modular systems can be implemented, fully comprehensible and eventually adaptable by the beneficiaries themselves. The modules will be useful in themselves in furthering overall objectives, and be vectors for know-how transfer.

The eventual decisions on national systems in each country based on an off-the-shelf international product, or home grown one, is not crucial to the success of this project. While the project comprises a high content of equipment supply, there is little risk that the customs services concerned will be saturated beyond their needs for basic familiarisation with automated data processing, advanced telecommunications equipment, and progressive implementation of appropriate automated national and regional systems.

The linking of this project with the ADB/EBRD conditional financing of the Almaty-Bishkek road is assumed to highlight the concern of all international agencies for linking external investment for infrastructure improvement with facilitation of regional trade.

Various other difficulties will be encountered:

- a) the existing data are outdated;
- b) the existing designs were made to FSU standards;
- c) the Contractor should decide, in consultation with the beneficiaries, what design to apply, in particular regarding the axle load standard for the pavement design (either the EU standard of 11.5 tons, or any standard more suitable - economically and technically - for traffic, trade and transit conditions in Central Asia);
- d) the existing information is partial only and fragmented, and must be supplemented by much field work;
- e) the field work is challenging, and accommodation during project execution will be basic;
- f) inspection of roads, geo-technical and topographical surveys, traffic surveys, need to be done in a timely manner;
- g) *For Module B, local design institutes* may be expected to be full partners.

The staff of the Road Departments are competent, very experienced and motivated.

4. MAIN COMPONENTS

4.1 *Module A*

4.1.1 Tasks

4.1.1.1 General Diligence

The Contractor will take a balanced approach to furthering the overall objectives of the project.

The apportionment of the supply budget should find a balance between automated trade facilitation systems, enforcement items, and other dispositions such as emergency generators, which might be necessary at some locations to keep the customs system working at a basic level.

Also, the Customs procedures at border crossings should be integrated in so far as institutionally possible, with the other controls, such as immigration and border security.

The level of computer skills available in each national customs agency should be investigated in a structured way, discussed fully with the customs committees' managements, and taken into account by the Contractor from the outset of the project. The IT, other tools, and training supplied should be well matched with the capacities of the beneficiaries to effectively exploit them.

4.1.1.2 Review of Previous Reports and Recommendations of TRACECA, International and National Agencies

The Contractor will review previous relevant advisory and training work including those sponsored by :

- TACIS
- WTO and WCO

He will also obtain and review national plans for customs system development, computerisation and reports of the principle problems, as viewed by national agencies. He will interview freight forwarders, licensed declarants and other users of the system.

He will consult with the Eurocustoms project or its successor.

4.1.1.3 Survey of Concerned Border Crossing, Inland Terminals and Central Customs Agency Data Processing Facilities

The Contractor will make a thorough survey of the facilities at the concerned border crossings, and inland centres. He will pay particular attention to power and telecommunications capacity and reliability at each node of the project system. He will ensure provision of adequate UPS, back-up generators, and telecommunications links to ensure that whatever system installed is highly robust, and that it can function in the event of power failures or erratic telephone links.

4.1.1.4 Liaise with the IJCMLA

The Contractor will send a delegate to each ICJMLA meeting (scheduled to occur twice yearly). He will present and promote technical and administrative proposals for customs IT standardisation to the IJCMLA.

4.1.1.5 Project Consultative Committee

The Contractor is to form a consultative committee of experts from each country to consider compatibility issues (data, architectures, etc).

Committee members should typically be heads of IT departments of the national customs committees, or other informed and responsible customs officers. The consultative committee meetings should be encouraged to invite others such as representatives of Eurocustoms, WCO, the IRU, FIATA, national road freight transport associations, and national freight forwarders associations, as advisers, or observers. However, dispersion of project focus should be avoided or little will be achieved. The first priority of the committee should be the resolution of regional technical compatibility issues at the customs officer level.

The committee should meet several times within the course of the project, at different locations each time. The Contractor should promote a free interchange of ideas between the countries at expert level, assist and encourage experts to make proposals, for example for compatible data formats, and systems for tracking of cargoes along the TRACECA route. Where political decisions may be necessary to implement such systems, or enforce standards, then formal submissions should be made to the IJCMLA.

The consultative committee should help to design the training curricula. As far as is practical, trainees should be brought together at one location within the region for the training events. This will encourage regional integration.

4.1.1.6 Conceptual Design

The Contractor in collaboration with the consultative committee will create a conceptual design of a flexible, regionally integrated, modular system for eventual full automation of the beneficiaries' national customs services. This should take into account the basic recommendations of the Computer Systems Report.

It will be used by the project as a regional framework for the individual modules implemented within each country. It should highlight:

- the technical interfaces required to be implemented by each country if and when they choose to set up a regional automated system
- qualitatively, the cost/benefit or lost opportunity implications of avoiding integration, using criteria to be proposed by the Contractor (e.g. time delays for users, inefficient use of man-power of the customs services, extending or limiting opportunities for fraudulent practices, etc.)

4.1.1.7 National IT Management Strategies

The Contractor will recommend an IT management strategy for each country. This will define how the overall management of computerisation will be undertaken in the longer term. It will also define the role of the present project, as part of that overall long term strategy for implementation. Whatever may be recommended in previous reports, these terms of reference take no position on the merits or otherwise of ASYCUDA, SOFIX or any other system which might constitute a possible basis for such long term strategies

4.1.1.8 Border Crossing System Designs

The Contractor will make schematic designs, detailed designs, and specifications for pilot modules for implementation within the project, in collaboration with the national authorities concerned, and according to international accepted best practice.

The recommendations of the TRACECA Trade Facilitation Computer Systems Report Section 3.2 System Functional Specification, are summarised below as guidelines:

- 1 Brief details of the consignment are recorded by customs at point of entry
- 2 Approval to move inland is given
- 3 Notification of expected arrival is sent by the border post to the regional office at which the declaration is to be presented, or to the exit border post for transit goods
- 4 Declaration is presented at the regional office, or by direct trader input
- 5 Declaration is checked and notification sent to the border post of entry, or to the central office
- 6 Goods in transit are presented at the border of exit, checked and notification sent
- 7 Data is captured from the declaration and any errors corrected. Validity checks and revenue calculations are made and reported
- 8 Further checks as appropriate, decisions on physical checks necessary etc
- 9 Documentary and physical checks as decided prior to payment
- 10 Payment made and goods released
- 11 Contraband report issued if checks reveal non-conformity
- 12 Reports are generated after a given period and displayed at locations concerned and central office. Discrepancies are reported and followed up if necessary.
- 13 Statistics are extracted from the system
- 14 Post release audit checks are identified by system and records transferred to a management information module
- 15 For exports, the same procedure would apply with initiation at the regional office

This description of a national system can be converted to apply to the region simply by extending the data transfer mechanisms across borders.

Where countries have opted for different systems, it will be necessary to create the interfaces for data exchange. It will not be necessary to create these interfaces under the project, if it is clear that the countries concerned are not

institutionally prepared to implement such data links. The degree of regional system integration, bi-lateral or multi-lateral, or none, is to be decided in the consultative committee forum.

Target processing times should be set for trucks travelling under the various regimes applicable (eg.10-12 minutes for TIR).

The total functioning of the various checks and operations at the border should be considered (e.g. customs, immigration/border guards, veterinary, phyto-sanitary, technical checks including weights, and dimensions, any taxes collected at the borders). The project will review, and attempt to integrate such divers activities. Reports recommend that collection of taxes should not take place at the border crossing itself.

The above guidelines are to be considered as descriptive of the core of the system processes to be supplied by the project, on a pilot basis for the border crossings designated. The Contractor in consultation with the authorities of the individual countries must decide on the equipment and software they require to be supplied under the present project for their pilot implementation module. This will relate to their present equipment, their existing commitments to software systems, the functions they wish to include in this project, their declared IT management strategy, and of course, to the project budget.

4.1.1.9 System Architecture

The following suggestions on system architecture were proposed by one of the beneficiary customs authorities. They are presented in these TOR as indicative of the aspirations of the beneficiaries, but not as a prescription:

Each automated border post should incorporate a standard design of LAN, which shall link the customs post, entrance and exit check points. Two computers are proposed one being used as a server with an INFORMIX DMS installed, the other will be a work station. Each border crossing should have appropriate telecommunications facilities.

In the regional customs agency one server with ORACLE DMS should be installed, with two workstations.

Data transmission between border crossing points, the regional customs agency and the central customs agency should be implemented by means of high speed digital communications lines, high speed digital radio bridges BreezeLink E1, and/or HDSL modems.

Tables of required equipment and services follows.

Table of technical facilities required for implementation of automatisisation

#	Name	Unit of measurement	Quantity	Price US\$	Amount US\$
1	Network equipment	Set	4	1774.00	7096.00
2	Server	Piece	1	1500.00	1500.00
3	Computer	Piece	51	1000.00	51000.00
4	Printer HP LJ 1100	Piece	16	400.00	6400.00
5	UPS 420	Piece	50	150.00	7500.00
6	Modem	Piece	8	260.00	2080.00
TOTAL:				75576.00	

Table of Technical Facilities Required for Provision of Communication and Data Transmission

#	Name	Unit of measurement	Quantity	Price US\$	Amount US\$
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1	Electronic card and Upgrade kit	Set	32	-	87800.00
2	Breeze Link radio modems	Piece	8	8500.00	68000.00
3	IPAPX routers	Piece	8	2650.00	21200.00
4	HDSL modem	Piece	8	1500.00	12000.00
5	Equipment installation	-	-	-	28352.00
TOTAL					217352.00

Table of Training and Software Cost

Cost of Software Products for the Central Apparat of SCC		
Product Name	Price US\$	Total Price US\$
Oracle Enterprise Server for 8 licenses	17960	19120
Tuning Pack for 8 licenses	1160	
Developer/2000 – 3 licenses	26985	34480
Designer – 1 license	7495	
Express Analyzer – 1 license	865	12555
Express Server – 1 license	5895	
Express Object – 1 license	5795	
Delphy Instrumental System	2800	2800
Developer Suite (WEB) – 1 license	9495	11395
Application Server (WEB) for 8 licenses	1900	
		80350

Training Cost		
Name of Software product	Training Cost for 1 Specialist US\$	Total Price US\$
1 Administrator of ORACLE data base	5060	10120
ORACLE Application development engineer	4400	17600
Olap analyst	1440	1440
Designer 2000	6480	6480
UNIX Network Administrator	2900	5800
UNIX System Administrator	2900	2900
		44340

Cost of Software Products for 4 ASCC, where Automatic Border Crossing Posts are situated		
Name of the Product	Costs US\$	Total Price US\$
Windows NT-Server – 20 licenses	3000	3000
Informix Universal Server – 10 licenses	4000	4000
		7000
Training Cost		
Name of a Software Product	Training Cost for 1 Specialist US\$	Total Price US\$
Administrator of INFORMIX Database	3000	6000

<i>Administrator of Windows NT Network</i>	2900	2900
		8900
<i>Cost of Software Product for 4 Automatic Border Crossing Posts</i>		
<i>Name of the Product</i>	<i>Cost US\$</i>	<i>Total Price US\$</i>
<i>Windows NT-Workstation for 8 Stations</i>	2400	2400

<i>Total Cost Table</i>	
<i>Name</i>	<i>Cost in US\$</i>
<i>Technical Equipment</i>	292928.00
<i>Software</i>	89750.00
<i>Training</i>	53240.00
<i>Total</i>	435918.00

The TRACECA Trade Facilitation Computer Systems Report recommends central linkage, as against border linkage, for regional integration. This report generally recommends development of the system from the centre, to regions, to the border crossings. This approach is not mandated on the present project, while some degree of integration of the border crossings functions with the regional and central authorities is.

4.1.1.10 Equipment Selection

The previous tasks provide guidelines for selecting equipment and software for procurement within the project. Enforcement and other equipment suggested for inclusion in the project includes:

- Axle weigh pads
- Generator sets
- Drug kits
- Infra-red document inspection equipment
- Endoscopes
- Search mirrors
- Geiger counters
- Office furniture where essential for operations

These TOR do not prescribe a procurement list for any country. After the technical surveys and discussions with the beneficiaries, the Contractor will propose and agree with each individual beneficiary country a procurement list for that country.

4.1.1.11 Procurement

The Contractor will write detailed specifications and procure the IT, telecommunications, software, enforcement equipment as determined in previous tasks.

The Contractor will act as the Procurement Agent for TACIS, either by employing staff specialising in that domain or by sub-contract.

The rigorous application of TACIS rules on supply contracts is to be foreseen.

Any software to be written explicitly for the project may be written by the Contractor, or he may procure it by contract. Regional suppliers of software able to provide full Russian or local language support are to be preferred.

This preference is to be expressed in the terms of the procurement tenders arranged under the project. Contractors are encouraged to employ local experts for writing software.

4.1.1.12 Installation, Commissioning and Training

The Contractor will install the equipment, commission systems, debug software, and fully train the beneficiaries' customs staff in the use of the systems installed (see also Section 4.1.1 concerning the Contractors responsibility for selecting appropriate systems)

He will ensure that all documentation, manuals, warranties and training is provided at least in English and Russian languages.

The Contractor will make practical recommendations on suitable remuneration levels, and ongoing training programmes, for specialist professional staff required to run the systems set up under the project.

4.1.1.13 Follow-up Support

The Contractor will provide follow-up support on system usage during a period of 6 months after provisional acceptance of the equipment or commissioning of the systems, whichever is the latest. This service is in addition to warranties which will be provided under the equipment supply contracts.

He will generally explain to the beneficiaries their rights under the warranties.

He will monitor the functioning of the systems, and include indicators of project impact in his Final Report

4.1.2. Implementation Procedures

The Contractor should foresee expertise in the following domains:

- management of (TACIS) supply contracts;
- customs, trade facilitation, border crossing procedures
- local and foreign IT and telecommunications

The key experts should be familiar with work overseas, preferably in the CIS. A small expatriate team is preferable to maintain relational continuity with the beneficiaries (e.g. an IT expert familiar with customs/EDI acting as Team Leader and principle expert, with short term input from a serving EU customs officer, and from a TACIS procurement expert).

The Contractor should spend a maximum of time in the beneficiary countries. Only tasks which could not be done in the region may be done in the EU. Reports, specifications and other written deliverables should be prepared and translated only in the region. All of the Contractors team members should involve the beneficiaries in all tasks they undertake on a day-to-day basis, and openly transfer know-how.

Equipment supplied should have local maintenance guarantees and facilities. Software supplied or developed should likewise have full local representation and support. During evaluation of tenders great attention will be paid to the credibility of local IT support which is proposed by tenderers, as such support will be crucial to the sustainability of the project. Well established local consultancies or local agencies of EU companies should be fully integrated into the project as sub-Contractors or suppliers of hardware and software.

As mentioned in the Tasks, training events should as far as practical be held at one location to bring together the local experts concerned. All costs for transport and accommodation of local experts for training, for consultative committee meetings, or for other reasons, should be supported by the project.

4.1.3 Project Schedule

The total duration of the project will be 24 months.

The project's milestones are :

• Inception report	end of month	2
• Progress report with system design and specification	end of month	6
• Progress report and start installation	end of month	12
• Complete commissioning and training	end of month	18
• Follow-up support	during 6 months	
• Draft Final Report	end of month	22
• Final Report	end of month	24

4.2 *Module B*

4.2.1 Phase 1 - Feasibility

4.2.1.1 General

The data collection in Phase 1 is considered to follow on from that carried out in the pre-feasibility study. It is not intended to repeat any work already undertaken or to change any basic premises.

In the succeeding sections, the Phase 1 tasks are considered under the following headings:

- (a) Traffic data
- (b) Road and bridge condition surveys
- (c) Topographical surveys
- (d) Geotechnical surveys
- (e) Preliminary designs and estimates
- (f) Environmental investigations
- (g) Economic evaluations
- (h) Reporting.

4.2.1.2 Traffic Data

The Contractor shall review and assess the adequacy of all previous traffic data for the purpose of designing the rehabilitation of the "selected road(s)". Traffic data shall include vehicle flows by type and diurnal patterns, together with representative axle loads and probable growth factors. Vehicle operating costs (VOCs) shall be determined by vehicle type, together with the possible effects on these of congestion and changes in speed/flow relationships e.g. on gradients. Traffic data shall be determined for discrete homogenous sections of road where it is apparent that these may differ from the average patterns.

Should the Contractor consider that additional traffic surveys of any kind (e.g. vehicle counts, axle loads, O/D patterns, localised variations) are necessary, full details should be given in the Inception Report together with proposals for carrying these out.

4.2.1.3 Road and Bridge Condition Surveys

In addition to establishing the existing condition of the road, the purpose of the condition surveys is to assess the causes and rate of deterioration in order to determine the most economic rehabilitation strategies.

The physical condition survey of the road should include visual cross-section data on pavement, shoulders, verges, embankments, cuttings, retaining walls etc. It should be supplemented by a pavement condition survey which should include any available historic construction data, test pitting or drillings to confirm pavement layer thicknesses and a deflection survey along the whole road to assess present pavement strengths or already failed sections.

The bridge condition survey should include examination of all bridge components to assess their load carrying capacity and probable future life. It should also include minor drainage structures and the associated drains, with an assessment of their adequacy.

4.2.1.4 Topographical Surveys

Topographical surveys should be carried out in sufficient detail to form the basis for detailed contract drawings for the reconstruction. They should also include - either in the first instance or at a later stage - detailed horizontal and vertical local surveys of any junctions where improved layouts might be required or sections of road where realignments would be beneficial.

4.2.1.5 Geotechnical Surveys

In conjunction with the pavement surveys, representative sampling and testing of pavement layers and formation should be carried out to determine their characteristics. The stability of existing earthwork, slopes should be verified. An investigation of materials sources and quarries should be undertaken to verify their suitability for pavement construction and to determine appropriate criteria and testing requirements to be included in the Technical Specification. The materials sources investigation should include the sources of bitumen for pavement construction.

4.2.1.6 Preliminary Designs and Estimates

Alternative rehabilitation strategies should be investigated as part of the feasibility phase and for this purpose preliminary designs and estimates will be made. It is expected that the aspects of investigation will include at least the following:

- (a) Criteria for overlaying or reconstructing pavement
- (b) Effect of adopting FSU or current European legal axle load
- (c) Design life (in years or standard axles etc)
- (d) Assumptions regarding frequency of major maintenance interventions
- (e) Benefits/costs of relieving critically trafficked sections e.g. by dualling, realigning, redesign of junctions or providing climbing lanes where appropriate.

Cost estimates for the finally proposed schemes should be separated into foreign exchange and local currency and indicate the amount of any local taxes and duties.

4.2.1.7 Environmental Investigations

The alignment of the rehabilitated road will remain broadly unchanged and the project is unlikely to involve significantly increased impacts on the natural environment such as major erosion, changes of streams, underground water and/or interference with animal and plant life. However, it will be necessary to plan measures to minimise the impact of the construction resulting from materials extraction and the construction processes. The Contractor shall prepare an Environmental Assessment analysis appropriate to the Bank's Environmental Category B, comprising:

- (a) identification of key project-related concerns with regard to environmental impacts on human health and safety,
- (b) compilation of key, environmental, health and safety regulations that will be relevant to the proposed project, and
- (c) cost estimates of appropriate mitigation measures and their incorporation into the engineering designs and contract documents and an Environmental Action Plan outlining the steps to be taken to implement the recommended mitigation measures.

4.2.1.8 Economic Evaluations

The economic analysis should essentially follow the methodology adopted in the pre-feasibility study. For the purposes of the evaluation, the project is to be separated into discrete but coordinated alternative betterment options, to determine the investment strategies displaying the highest socio-economic returns. Cost estimates should be based on whole life costing, including subsequent maintenance, debt servicing and environmental mitigation measures etc. The economic analysis should be based on discounted flows of costs and benefits, leading to Net Present Values and Internal Rates of Return. Sensitivity analysis should be carried out for the significant variables, including the cost of capital, traffic growth rates, design parameters and VOCs etc.

4.2.1.9 Reporting

Two months after commencement of work on the assignment, the Contractor shall provide an Inception Report to the Client and the Bank summarising his initial findings. This report shall include a review of the data obtained to date, with recommendations for any further surveys that are considered to be required and the proposed Works Programme as a detailed bar chart schedule indicating the expected timing for key events. An Interim Progress Report is to be submitted at the end of month 6, giving a brief review of progress. A Feasibility Report should be submitted at the end of Phase 1 summarising the work done and including details of the recommended rehabilitation strategy and the proposed design standards to be adopted. Further details of the distribution of reports are given in section 6.

Should the Contractor consider it advisable for better liaison to prepare detailed Working Papers on separate aspects of the work, these should preferably be included as annexes to scheduled reports, rather than being submitted on an ad hoc basis.

4.2.2 Phase 2 - Detailed Engineering & Tender Documents

4.2.2.1 Detailed Engineering Design

The detailed engineering design should be carried out on the basis of the agreed investment proposals set out in the Feasibility Report. It should be to a level suitable for international competitive bidding by open tendering in accordance with EBRD procurement procedures.

Design details (e.g. of culverts, road furniture, etc) should be in accordance with existing Uzbekistan standards unless the Contractor considers these to be unsuitable or capable of improvement.

4.2.2.2 Tender Documents

Tender documents should be prepared in English in accordance with the FIDIC Conditions of Contract for Works of Civil Engineering Construction (Fourth Edition 1987, with 1992 reprint amendments), amended if necessary to comply with the EBRD's rules and any particular conditions, required by The Government of Uzbekistan. They should include detailed engineering drawings, specifications and Bills of Quantities.

4.2.2.3 Prequalification of Contractors

The Contractor shall prepare Prequalification Documents with suitable criteria for the prequalification of contractors and implement the prequalification process. The documents and prequalification procedures shall be in accordance with the EBRD's current standards. On receipt of the prequalification applications, the Contractor shall prepare a Prequalification Report for EBRD and Government of Uzbekistan, giving his recommendations on which contractors should be prequalified.

4.2.2.4 Tender Procedures

The Contractor's advice and assistance to Government of Uzbekistan in contract procurement will include but not be limited to the following:

- (i) production and distribution of tender invitations and tender documents
- (ii) arranging tender visits and answering tenderers' enquiries on behalf of the Client
- (iii) evaluating tenders and making recommendations to the Client on the selection of contractor
- (iv) preparing final contract documents for contract signature with the selected contractor,
- (v) advising the Beneficiary on formal contract notices and procedures that may be necessary prior to commencement of the works. This activity will include ascertaining whether any permits or licences are required under Uzbekistan regulations to allow the Contractor to have formal status as engineers contributing to a construction project in Uzbekistan.
- (vi) advising the Beneficiary on any permits or licences which may be needed for a construction company (including foreign construction companies) to operate in Uzbekistan and incorporating these requirements into the project documents (including the tender documents and other documents, as appropriate).

4.2.2.5 Reporting

At the end of Phase 2 the Contractor should submit a Design Report summarising the whole of the work, the planned rehabilitation strategy and the proposed contractual arrangements. This report should contain an Engineer's Estimate for the contract works., separated into foreign and local currency, together with any expected taxes and dues.

4.2.3 Implementation Procedures

4.2.3.1 Contacts and Liaison

The Partner Organisation, on behalf of the Beneficiary, for the project will be Uzavtoyol and the Contractor will report to the Director. Written reports will be copied to the EBRD's designated staff. The Contractor should at all times liaise closely with the responsible Ministry and the concerned local agencies.

The Contractor will maintain continuous close liaison with Uzavtoyol through the latter's designated staff. In addition to the formal reporting requirements, a regular programme of briefing meetings should be instituted by the principal staff.

The Contractor is expected to carry out at least 60% of the work in Uzbekistan and is encouraged to work with local staff and individuals.

4.2.3.2 Administration and Logistics

Government of Uzbekistan will provide the following support and services to the Contractor:

- (i) all available data and information relating to the project
- (ii) suitable furnished and serviced office accommodation with heating, lighting, electricity and international telephone connections, the Contractor will be responsible for the cost of all international calls
- (iii) necessary arrangements for obtaining all visa, permits, licences and customs clearance necessary for the performance of the services in Uzbekistan.

The Contractor will supply all necessary computer hardware and software and equipment to be used for road surveys. On conclusion of the assignment, this equipment will be handed over to Uzavtoyol.

4.2.4 Project Schedule

The Contractor will be expected to mobilise his team and start work within two weeks after contract signing. The assignment will be implemented according to the following indicative timetable:

	<u>End of Month</u>
Contract signing	0
<u>Phase 1</u>	
Mobilisation	0.5
Inception Report submitted	1.5
Interim Progress Report submitted	4
Draft Feasibility Report submitted	7
Final Feasibility Report issued	9
<u>Phase 2</u>	
Draft Prequalification Documents submitted	9
Prequalification Documents issued	11
Prequalification applications returned	14
Draft Tender Documents submitted	14
Prequalification Report submitted	15
Final Tender Documents issued	16
Draft Design Report submitted	17
Final Design Report issued	19
Construction Tenders returned	20
Tender Evaluation Report submitted	21
Contract Award	23

This schedule may be modified as the work proceeds, in consultation with the Beneficiary, the Bank and the European Commission and on the general principle that it should be kept as short as possible consistent with effective project management and provision of the obligatory intervals for reviews and approvals.

4.3. Global Budget

The global budget is 2 000 000 EURO, broken down as follows for the purposes of tendering this project:

Module A /	
System design and specification, training activities (TA)	400 000 EURO
Supply of equipment and software (investment)	1 100 000 EURO
Module B / Feasibility Study	500 000 EURO
Total	2 000 000 EURO

To allow a margin of flexibility, the design, specification and training activities may later be varied up to 70% of total budget, depending on needs and requirements in each state, and always in common agreement between the Contractor, the beneficiary authorities, and TACIS.

The firm commitment of TACIS to the participation in the ADB Almaty-Bishkek Road Rehabilitation Project is for USD 800 000, or USD 400 000 each to the Kazakh and Kyrgyz border posts on this stretch of road. These sums include both the investment and the associated TA. The investment items need not all be physically located at the border crossing, but could be in part located, for example, at the regional customs centres and or at the central customs authorities head office in Astana. The important principle to respect is that the items supplied are to be affected to a functional scheme for the facilitation of customs procedures for traffic using the Almaty-Bishkek border crossing.

The remaining budget of approximately MEURO 0.7 (depending on future EURO/USD exchange rates) is to be allocated to the following border crossings:

- Port of Turkmenbashi
- Turkmenistan/Uzbekistan (Farab)
- Uzbekistan/ Kyrgyzstan (Osh)
- Uzbekistan/Tajikistan (Khojent)

Each land border crossing shall be considered as comprising two border posts, one post for each country. At the Port of Turkmenbashi only one post in total is involved. Each border post to be budgeted equally (i.e. approximately 100 000 EURO per post). Similarly to the Almaty-Bishkek Road border crossing, it is not imperative that all equipment supplied is to be installed at the border. It is however essential that the equipment be serving the traffic at the designated border crossings, even if not physically present there.

Software written specifically for the project, if written by the Contractor in-house or by directly employed local consultants, should not exceed 5% by total value of the contract. Such services may be included in the investment budget.

If a Procurement Agent is sub-contracted by the Contractor, the agent's fee should be included in the TA budget.

5. REPORTING

5.1 Reports

The Inception Report, Progress Reports and (Draft) Final Report for the project are to be delivered in the numbers, languages and locations as follows :

	Bound		Loose-leaf		CD (Eng. + Rus.)
	English	Russian	English	Russian	
TACIS Brussels	2	1	0	0	1
TACIS National CU (5 states)	2	6	1	1	1
TACIS Moni- toring Team (Central Asia – Europe)	2	1	0	0	0
TRACECA Coordination	2	2	1	1	1
Counter-parts	As necessary	As necessary	As necessary	As necessary	As necessary
EBRD	2	0	2	0	0
Asian Development Bank, Manila and local	3	0	0	0	1

Lists of addressees for each report are to be provided to the TACIS CUs.

At least one copy of each report should be delivered directly to the key project counter-part.

Copies of the Delivery Notes to the recipient(s) are to be provided by fax to the Tbilisi TRACECA co-ordination office.

In order to implement the reports on the TRACECA web site, the report must be provided by the contractor under an electronic format such as PDF – Acrobat Reader in order to include photographs, booklets, maps, diagrams, drawings ... One report has to correspond to one Acrobat reader file. Reports transmitted in multiple files and of different kind will be refused.

All information to obtain the necessary software (Adobe Acrobat Pro 4.0 or higher) for creating Acrobat Reader files can be obtained at the following Internet address :

<http://www.adobe.com/store/products/acrobat.html>

The importance of high quality Russian texts, delivered on time, cannot be over emphasized. The reporting dates in these TOR are for the delivery of the Russian language text and the English language text to be provided at the same time.

Reporting is to be in accordance with TACIS Guidelines.

These foresee :

Project Inception Report

An Inception Report shall be issued within 2 months of the start of the project. It shall summarise initial findings and propose any modifications to the methodology and work plan. In particular it will adapt the work plan to the needs of the beneficiaries taking into account the activities of other Technical Assistance programmes, avoiding duplication of effort and addressing unfilled needs.

It will also confirm or modify institutes/organisations/consulting bodies to be directly involved in the implementation.

The report distribution lists will be included.

Project Progress Report

These reports will be submitted at the end of months 6, 12 and 18. They will cover progress to date.

(Draft) Final Report

The Draft Final Report will be submitted at the end of month 22 and the Final Report at the end of month 24.

All reports must include an Executive Summary.

It would be incorrect to assume that changes to project scope which require changes to the Contractor/TACIS contract can be effected by a Report.

5.2 Deliverables

Module B will require specific deliverables. The distribution of documents to be supplied by the Contractor is shown in the table following. In addition to the bound reports, copies of all English text and tables should be submitted to the Bank on computer diskettes in Word 6.0 and Excel 5.0 software.

When the issue of draft documents is stipulated, Uzavtoyol and the Bank will respond with their comments within four weeks. The Final documents will then be issued taking account of these comments, within four weeks after receipt of the comments from Uzavtoyol and the Bank.

Documents	Numbers	Recipient	Language
Draft Feasibility Report	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
	1	TACIS Coordination	English
	1	TACIS Monitoring Team	English
Final Feasibility Report	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
	1	TACIS Coordination	English
	1	TACIS Monitoring Team	English
Draft Prequalification Document	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
Prequalification Documents	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
	As required	Applicants	English
Prequalification Report	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English

Draft Tender Documents	6	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
Final Tender Documents	6	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
	As required	Tenderers	English
Draft Design Report	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
Final Design Report	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
Tender Evaluation report	4	Uzavtoyol	Russian
	1	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
Final Contract Documents	6	Uzavtoyol	Russian
	2	Uzavtoyol	English
	2	EBRD	English
	1	TACIS Brussels	English
	As required	Contractor	English

6. FACTORS ENSURING SUSTAINABILITY

6.1. Institutional Appraisal

The project is linked to a broad effort by TRACECA and by the Asian Development Bank to facilitate trade within the region, and to encourage the adoption of customs procedures equivalent to EU and international practice. The consultative committee to be set up within the project is intended to provide a forum for local experts to meet and discuss technical problems associated with integration of customs procedures. This complements policy discussions which are the domain of the IGC-MLA.

Large transport investment projects are already being undertaken by development banks. They are examining in detail the institutional structure of the Beneficiary. These TOR require the Contractor to take institutional initiatives by other donors, as well as previous Tacis TRACECA projects, into account.

6.2. Economic and Financial Appraisal

Faster and more efficient border crossing procedures would both encourage regional trade, and provide higher customs revenues.

The feasibility studies included in this project are linked to EBRD investment projects for a road segment between Tachkent and Osh.

6.3. Political Environment

There is a clear political mandate for this project, evidenced by the signature of the TRACECA MLA in Baku in September 1998, at Presidential level, and by the requirement for signature of the ADB Kazakhstan/Kyrgyzstan Cross Border Agreement as a condition for the Bishkek-Almaty Road Rehabilitation loan. At the time of preparation of these TOR, the ADB agreement had been included in the Memorandums of Understanding between the ADB and the countries concerned, and signed at Ministerial level.

7. ENVIRONMENTAL IMPACT

There are only slight environmental implications to the module A. Vehicles delayed at border crossings do emit atmospheric pollutants while waiting, and this source would be reduced by the project.

Environmental impacts are an issue for the feasibility studies and will be addressed in the Module B.

The direct environmental impact of the project is expected to be low, though the construction of potentially required new bridges and bypasses may have a non-negligible environmental impact. However, the safer road traffic conditions resulting from the rehabilitation and upgrading of roads are likely to reduce the number of accidents.

8. MONITORING AND EVALUATION

The appointed Contractor should meet with the TACIS monitoring Team early in the project to agree a set of project M&E indicators.

Indicators might include:

- Due diligence in supplying equipment and training which is:
 - matched to the computer skills available in beneficiary countries customs agencies
 - readily maintainable at the locations where it is installed
- Agreement at expert level on regional interfaces for national customs computerised systems
- Adoption at working practice level, of customs clearance procedures which:
 - reduce delays at border crossings and inland terminals
 - improve revenue collection
 - reduce illicit traffic
 - improve the quality and availability of cross border trade data
- the existing studies, designs, surveys and plans are inventoried, consolidated, updated and completed;
- additional investigations, surveys, plans, engineering designs, drawings, bills of quantities, technical specifications and cost estimates are made;
- a detailed bankable feasibility study, including technical, economic and environmental feasibility, is prepared;
- pre-qualification and bidding documents are issued;
- transfer of know-how to Beneficiaries and local design institutes is realized.

STATEMENT OF ENDORSEMENT

Project Title: Central Asian Road Border Crossings

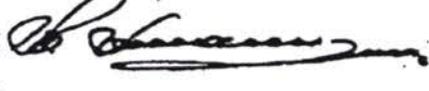
Recipient Institutions:

Ministry of Transport, Communications and Tourism of Kazakhstan/Customs Committee of Kazakhstan
 Ministry of Transport and Communications of Kyrgyzstan /Customs Committee of Kyrgyzstan
 Customs Committee of Tajikistan
 Customs Committee of Turkmenistan
 Customs Committee of Uzbekistan

We, the undersigned, hereby declare that we,

1. have carefully read the outline Terms of Reference (TORs) of the Project, which are attached to the present Statement of Endorsement;
2. agree that the outline TORs appended to hereto will serve as the basis for the development of the full Terms of Reference;
3. accept that this Statement of Endorsement is also applicable to the full Terms of Reference and that no further endorsement will be necessary for project implementation to commence;
4. approve the TOR, and are prepared to accept the technical assistance therein described;
5. accept that the experts in charge of rendering the technical assistance according to the outline TORs be selected according to the procedures of the Commission of the European Communities;
6. undertake to exert all our best efforts in order to make the rendering of the experts' technical assistance possible and to extend said experts our fullest co-operation. In particular, we undertake to put at the experts' disposal, free of charges, our facilities and staff, as they may be necessary;
7. undertake to acquire, free of charges, the ownership of the equipment purchased for the implementation of the Projects, as and when the transfer of property of said equipment is provided for under the outline TORs or the contract between the Commission of the European Communities and the experts, and to provide said experts with separate official statements certifying the receipt of the equipment;
8. shall allow, upon reasonable notice, independent inspectors, appointed by the Commission of the European Communities, and/or the Court of Auditors of the European Communities, to monitor the development of the Project and undertake to give said inspectors and/or the Court of Auditors the necessary assistance.

For and on behalf of:

	Name, Title	Place	Date	Signature
KAZAKHSTAN			24.09.99	
KYRGYZSTAN				KARIBJANOV
TAJKISTAN				DZHANGOSSIN
TURKMENISTAN				
UZBEKISTAN				

ЗАЯВЛЕНИЕ ОБ ОДОБРЕНИИ.

Название проекта: Центральные Азиатские автодорожные пограничные посты

Учреждения-получатели:

Министерство транспорта коммуникаций и туризма Казахстана/Таможенный комитет Казахстана

Министерство транспорта и коммуникаций Кыргызстан/Таможенный комитет Кыргызстана

Таможенный комитет Таджикистана

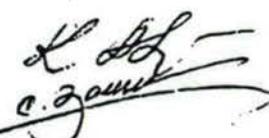
Таможенный комитет Туркменистана

Таможенный комитет Узбекистана

Мы, ниже подписавшиеся, настоящим заявляем, что мы:

1. Тщательно изучили описание Технического Задания Проекта (ТЗП), приложенного к настоящему Заявлению об Одобрении;
2. Согласны с тем, что описание ТЗП будет служить основанием для разработки полного Технического Задания;
3. Согласны с тем, что это Заявление об Одобрении является также приемлемым для полного Технического Задания и в будущем другое одобрение не будет необходимым для осуществления проекта;
4. Одобряем данное описание ТЗП и готовы принять описанное в нем техническое содействие;
5. Согласны с тем, что эксперты, которым поручается оказывать это техническое содействие согласно ТЗП, были отобраны в соответствии с процедурами Комиссии Европейских Сообществ;
6. Обязуемся приложить максимум усилий к тому, чтобы сделать возможным оказание нам технического содействия этими экспертами и полностью сотрудничать с ними. В частности, мы обязуемся, по мере необходимости, бесплатно предоставлять в распоряжение экспертов наши оборудование и персонал;
7. Обязуемся бесплатно приобрести право собственности на приобретенное оборудование для осуществления этого Проекта, в соответствии с тем как передача права собственности на это оборудование предусмотрена ТЗП или контрактом между Комиссией Европейских Сообществ и экспертами, и предоставить вышеупомянутым экспертам официальный документ, удостоверяющий получение этого оборудования;
8. Будем разрешать, при получении мотивированного извещения, независимым инспекторам, назначенным Комиссией Европейских Сообществ, и/или Счетной Палате Европейских Сообществ, контролировать ход выполнения работ по этому проекту, и обязуемся оказывать вышеупомянутым инспекторам и/или Счетной Палате необходимое содействие.

От имени и по поручению:

	Имя, должность	Место	Дата	Подпись
КАЗАХСТАН				
КЫРГЫЗСТАН	Замиров Замиров С.С.	Бишкек Бишкек	15.09.99. 15.09.99.	
ТАДЖИКИСТАН				
ТУРКМЕНИСТАН				
УЗБЕКИСТАН				

STATEMENT OF ENDORSEMENT

Project Title: Central Asian Road Border CrossingsRecipient Institutions:

Ministry of Transport, Communications and Tourism of Kazakhstan/Customs Committee of Kazakhstan

Ministry of Transport and Communications of Kyrgyzstan /Customs Committee of Kyrgyzstan

Customs Committee of Tajikistan

Customs Committee of Turkmenistan

Customs Committee of Uzbekistan

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7. undertake to acquire, free of charges, the ownership of the equipment purchased for the implementation of the Projects, as and when the transfer of property of said equipment is provided for under the outline TORs or the contract between the Commission of the European Communities and the experts, and to provide said experts with separate official statements certifying the receipt of the equipment;
8. shall allow, upon reasonable notice, independent inspectors, appointed by the Commission of the European Communities, and/or the Court of Auditors of the European Communities, to monitor the development of the Project and undertake to give said inspectors and/or the Court of Auditors the necessary assistance.

For and on behalf of:

	Name, Title	Place	Date	Signature
KAZAKHISTAN				
KYRGYZSTAN				
TAJIKISTAN	M. Kasymov, Deputy Chairman	Customs Office Dushanbe	21.09.99	
TURKMENISTAN				
UZBEKISTAN				

ЗАЯВЛЕНИЕ ОБ ОДОБРЕНИИ

Название проекта: Центральные Азиатские автомобильные пограничные посты

Учреждения - получатели:

Министерство транспорта коммуникаций и туризма Казахстана/Таможенный комитет Казахстана
 Министерство транспорта и коммуникаций Кыргызстана/Таможенный комитет Кыргызстана
 Таможенный комитет Таджикистана
 Таможенный комитет Туркменистана
 Таможенный комитет Узбекистана

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3. согласны с тем, что это Заявление об Одобрении является также приемлемым для полного Технического Задания и в будущем другое одобрение не будет необходимым для осуществления проекта;
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6. обязуемся приложить максимум усилий к тому, чтобы сделать возможным оказание нам технического содействия этими экспертами и полностью сотрудничать с ними. В частности, мы обязуемся, по мере необходимости, бесплатно предоставлять в распоряжение экспертов наши оборудование и персонал;
7. обязуемся бесплатно приобрести право собственности на приобретенное оборудование для осуществления этого Проекта, в соответствии с тем как передача права собственности на это оборудование предусмотрена ТЗП или контрактом между Комиссией Европейских Сообществ и экспертами, и предоставить вышеупомянутым экспертам официальный документ, удостоверяющий получение этого оборудования;
8. будем разрешать, при получении мотивированного извещения, независимым инспекторам, назначенным Комиссией Европейских Сообществ, и/или Счетной Палатой Европейских Сообществ, контролировать ход выполнения работ по этому проекту и обязуемся оказывать вышеупомянутым инспекторам и/или Счетной Палате необходимое содействие.

От имени и по поручению:

	Имя, должность	Место	Дата	Подпись
КАЗАХСТАН				
КЫРГЫЗСТАН				
ТАДЖИКИСТАН				
ТУРКМЕНИСТАН	<i>Тредсегаев</i>		<i>05.10.99</i>	<i>[Подпись]</i>
УЗБЕКИСТАН	<i>Государственный Т. Беловский</i>			

ЗАЯВЛЕНИЕ ОБ ОДОБРЕНИИ

Название проекта: Центральные Азиатские автодорожные пограничные посты

Учреждения - получатели:

Министерство транспорта коммуникаций и туризма Казахстана/Таможенный комитет Казахстана
 Министерство транспорта и коммуникаций Кыргызстана/Таможенный комитет Кыргызстана
 Таможенный комитет Таджикистана
 Таможенный комитет Туркменистана
 Таможенный комитет Узбекистана

Мы, нижеподписавшиеся, настоящим заявляем, что мы:

1. тщательно изучили описание Технического задания Проекта (ТЗП), приложенного к настоящему Заявлению об Одобрении;
2. согласны с тем, что описание ТЗП будет служить основанием для разработки полного Технического задания;
3. согласны с тем, что это Заявление об Одобрении является также приемлемым для полного Технического задания и в будущем другое одобрение не будет необходимым для осуществления проекта;
4. одобряем данное описание ТЗП и готовы принять описанное в нем техническое содействие;
5. согласны с тем, что эксперты, которым поручается оказывать это техническое содействие согласно ТЗП, были отобраны в соответствии с процедурами Комиссии Европейских Сообществ;
6. обязуемся приложить максимум усилий к тому, чтобы сделать возможным оказание нам технического содействия этими экспертами и полностью сотрудничать с ними. В частности, мы обязуемся, по мере необходимости, бесплатно предоставлять в распоряжение экспертов наше оборудование и персонал;
7. обязуемся бесплатно приобрести право собственности на приобретенное оборудование для осуществления этого Проекта, в соответствии с тем как передача права собственности на это оборудование предусмотрена ТЗП или контрактом между Комиссией Европейских Сообществ и экспертами, и предоставить вышеупомянутым экспертам официальный документ, удостоверяющий получение этого оборудования;
8. будем разрешать, при получении мотивированного извещения, независимым инспекторам, назначенным Комиссией Европейских Сообществ, и/или Счетной Палатой Европейских Сообществ, контролировать ход выполнения работ по этому проекту и обязуемся оказывать вышеупомянутым инспекторам и/или Счетной Палате необходимое содействие.

От имени и по поручению:

Имя, должность Место Дата Подпись

КАЗАХСТАН

КЫРГЫЗСТАН

ТАДЖИКИСТАН

ТУРКМЕНИСТАН

УЗБЕКИСТАН

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Салид-Адил
первый зам.
председателя ГТК РУ



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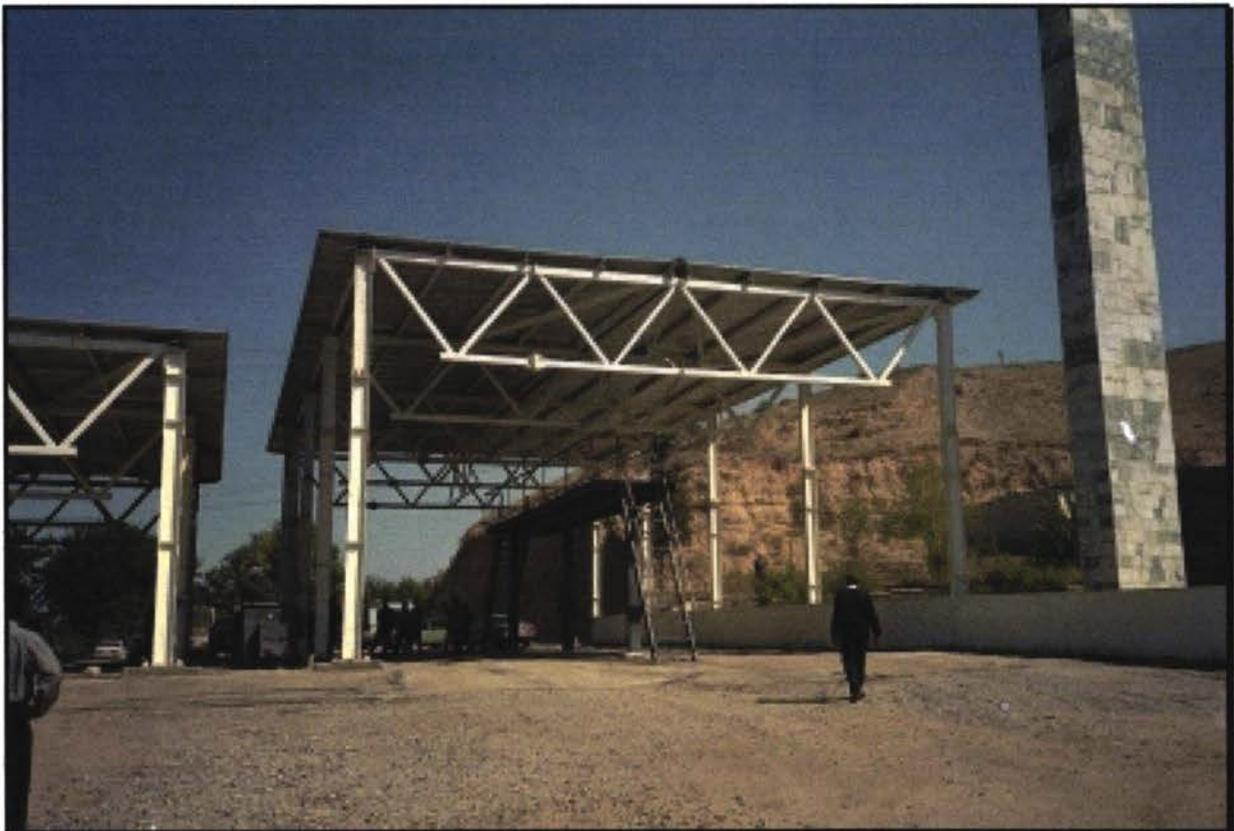
TECHNICAL PROPOSAL

SCR-E/110622/C/SV/WW

Central Asian Road Border Crossing (Incl. Road Feasibility Study)

18 February 2001

Our ref. 000906





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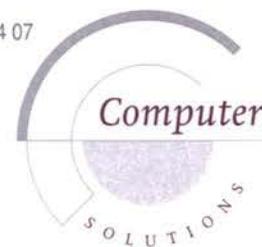
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A. General data

Proposal	▪ Technical Proposal
Project Title	▪ Central Asian Road Border Crossings (including Road Feasibility Study)
Project Number	▪ SCR-E/110622/C/SV/WW
Date	▪ February 18, 2001
Reference number Computer Solutions B.V.	▪ 000906 - Technical Proposal
Based on	▪ Invitation to tender issued by the European Commission for a project financed from TACIS funds, including all relevant documents
Contact person Computer Solutions BV	▪ Mr. Luc Verheye Mr. Ir. Jack Buis
Contact person Tractebel Development Engineering N/A	▪ Mr. Michael Sims Mr. Jacques Pepin

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Technical proposal 000906

18-02-01

SCR-E/110622/C/SV/WW - Central Asian Border Crossings

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B. Organisation and methods

B.1. Introduction

Computer Solutions of Holland, in association with the jointly short-listed company Tractebel Development Engineering of Belgium, and with Parkman of the United Kingdom have prepared this proposal to provide the services required in this two-module TRACECA project "Central Asian Border Crossings".

Computer Solutions is both the overall project lead company, and will provide the consulting services required in Module A.

Tractebel Development Engineering, assisted by Parkman, will take charge of Module B.

We have also arranged for local subcontractors to assist us in the region, for both Modules. These will include the well-known Almaty transport consulting firm of NIIT and the parastatal "Consortium for the Europe-Asia Transcontinental Road Highway, of Tashkent".

The associated firms have joined together for this project as a consequence of previous collaboration on other TRACECA projects. It is based on complementarity of corporate skills and mutual confidence that each of our firms can successfully complete their assigned tasks.

The organisation and methodologies, which we propose to provide the required services, are based on, among other elements:

- ❖ The terms of reference, and complete compliance with their requirements;
- ❖ *Visits to the regional border crossings;*
- ❖ *Discussions with senior customs committee officers in the states concerned;*
- ❖ Visits to varied and typical road sections in Uzbekistan;
- ❖ The background knowledge of our staff, who between them total many years relevant technical and in-region experience.

Furthermore, in selecting professional staff for our teams, we emphasise that we have chosen mostly permanent employees from our firms, with TRACECA regional experience.

Our technical proposal comprises the following sections:

B. Organisation and Methods

B.1. Introduction

B.2. Project Management and Backstopping

B.3. Understanding of the Terms of Reference

B.4. Workplan

C. Staffing

C.1. Summary

C.2. CV

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B.2. Project Management and Backstopping

The full experience and resources of the firms making this proposal will be available for the project, across the Modules as far as is technically and administratively useful.

All of the firms preparing this tender have considerable experience of managing projects in CIS countries, and in Central Asia. This fact is reflected not just in our firms' general references, but also in the management staff who are assigned to field and backstopping activities for the present project.

As the risk of technical interference between the two project Modules is low, and the technical expertise of the staff involved on the two Modules is distinctly different, then there is little advantage in establishing a bi-module technical management committee. There are however certain overall project synergies within our firms which we plan to exploit. A Tractebel Development Engineering (TDE) staff member assigned to Module B, has considerable knowledge of the relevant institutional structures in the other four countries, concerned only by Module A. Likewise the Parkman field manager has similar experience, and could help out if called upon to do so. *Hence Module B staff with regional experience will provide in-the-region relational support to Module A staff.*

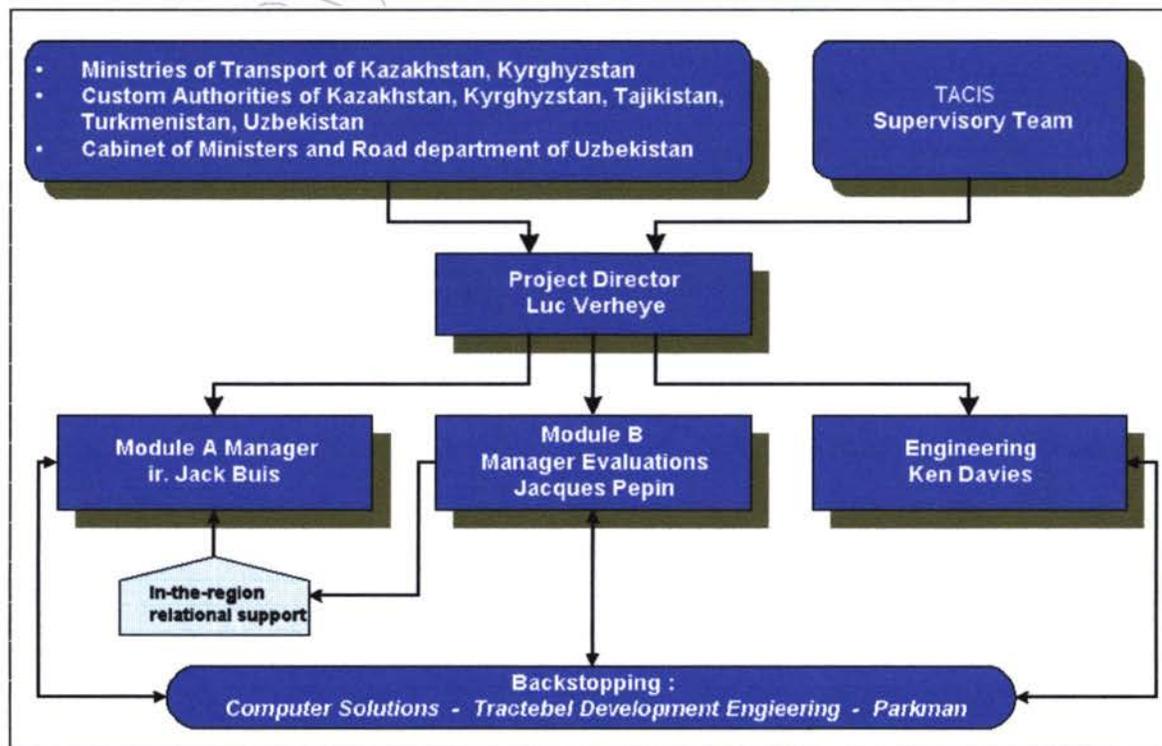
The administrative management of an association of firms such as ours, undertaking a project such as the present one is relatively simple, as the division of tasks is very clearly defined. Furthermore, the critical paths in each module are not linked, so that delays or problems in one Module will not impact tasks in the other. There will however be a need for excellent administrative management to ensure that all project documentation, whether of a technical or administrative nature, is systematically stored and distributed to the correct destinations. Broadly speaking this includes:

- ❖ Reports;
- ❖ Procurement documentation;
- ❖ Project administration items (timesheets, air-tickets, etc);
- ❖ Quality Assurance.

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Our overall management structure and communication links to handle these tasks will be as follows:



The professional staff proposed in this tender are nearly all permanent senior in-house employees of our firms. The module teams are therefore composed of staff who have worked together with each other previously, and who are organised already under existing tried and tested corporate and project management structures. This implies several important advantages for the present project, such as:

- ❖ Project communications are largely a continuity of established corporate communications;
- ❖ The project managers are completely familiar with the skill profiles of the staff that they are mobilising;
- ❖ The professional staff concerned are fully committed to the success of the project, by enhancing the reputations of our firms in providing the required services to the complete satisfaction of TACIS, the TRACECA beneficiary state authorities concerned, and the EBRD;
- ❖ The project staff know exactly what backstopping and technical resources they can draw on from their home offices

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In fact the three firms associated in this tender are all major consulting firms and possess broad capacities which could be made available to back up the designated project teams if required. The structures, technical means and experience records of the firms are described in the pages, which follow.

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B.2.1. Computer Solutions Standard Corporate Profiles

B.2.1.1. General data

Address Takkebijsters 17G, 4817 BL Breda
Telephone (+31)76 - 520.24.05
Fax (+31)76 - 520.24.07
Internet <http://www.coso.nl>

Project capacity 25 engineers

Specialized in Logistics automation in transport and industry.
Connectivity to third party hardware and software.

- Applications based upon Progress 4GL, Powerbuilder/Sybase, Oracle, Forte, C, C++;
- Experienced in development of logistic systems;
- Client server computing;
- Web enabled / intranet applications;
- System integration with:
 - Information systems;
 - Warehouse management systems;
 - Orderadministration & invoicing,;
 - Financial administration: procurement and integration;
 - *Customs formalities*;
 - Planning (trucks, ships, wagons);
 - Traffic management on-site;
 - Automatic identification (goods and trucks);
 - Tracking & tracing (goods and trucks);
 - Automatic labeling & scanning;
 - Wireless communication;
 - All registrations of weight and integration with all kind of weighing equipment;
 - (Automatic bulkscalers, weighing in motion, weighbridges, plateauweighers, etc.).

Service On a contract basis or on request, to a maximum availability of 24 hours a day, 7 days a week. Modem support is offered standard.

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Authorisations

- Authorised Progress VAR
- System Integrator Gold partnership Powerbuilder/Sybase
- Progress 4GL Beta site
- Authorised SCO reseller
- SCO Beta site
- Microsoft NT Beta site
- Microsoft Authorised Network specialist

Memberships

Member of The Rotterdam Maritime Group (RMG)
Member of The Rotterdam Port Promotion Council (RPPC)

B.2.1.2. Specialism and experience Computer Solutions B.V.

Computer Solutions is specialised in automation with 4GL applications, especially in transport, logistics and industry.

Computer Solutions realises complete turnkey (fixed price, fixed date) projects, consisting of

- ❖ Project management;
- ❖ Functional analysis and technical design;
- ❖ Selection, procurement, delivery and installation of hardware and standard software; (e.g. computer networks, mobile communication, special devices - e.g. barcode devices, label printers, proximity tags, identification tags, (D)GPS equipment - etc.);
- ❖ Development of bespoke software;
- ❖ Realisation and implementation of the complete system, consisting of the selected hardware components and (custom / bespoke) application software;
- ❖ Testing and training of users;
- ❖ Support (standard modem support offered) to a maximum of 24 hours 7 days a week.

Computer Solutions has realised projects all over the world, e.g. Mexico, Australia, Morocco, Spain, England, The Netherlands, Belgium, France, Ukraine, Georgia, Lithuania, Latvia, Cape Verdian Islands, Benin, etc.

Module A, including the overall project management of the project for 'Central Asian Road Border Crossings' matches perfectly the skills and proven experience of Computer Solutions. Based upon the proven international experience of Computer Solutions with similar projects, we state formal that Computer Solutions is able to provide all services and deliver/procure all supplies under said project.

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B.2.1.3. Technical and staff capabilities

B.2.1.3.1. Technical capabilities

Computer Solutions is using up-to-date, proven and professional tools to realise systems. Systems are realised in a client-server architecture, using 4GL/RDBMS tools like Progress 4GL, Oracle, PowerBuilder/Sybase, Forté, C and C++.

Computer Solutions has proven experience in realising stable (and high tech) systems, implementing mobile communication, automatic identification (goods, trucks, chauffeurs), barcoding, unmanned (remote) control, RDFC, etc.

B.2.1.3.2. Staff capabilities

Computer Solutions employs 25 engineers, each of them having between 1 and 20 years of professional experience in management consultancy, project management, software and hardware engineering.

All of the engineers - proposed as member of the staff for this project - have minimal a qualification of civil engineer or technical engineer (certified and registered degree).

All of these engineers have proven experience in project management and software development with up-to-date software engineering and professional 4GL/RDBMS tools.

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B.2.1.4. Some important reference projects

1. Port of Illyichovsk (Ukraine) - port of Poti (Georgia)

Establishment of a Ferry Cargo Movement Computer System and Supply & Installation of the necessary computers and communication equipment for the Ports of Illyichovsk (Ukraine) and Poti (Georgia). The project with a total projectsum of approximately 2 mio. US \$ was financed by the European Commission (Takis).

System application, interfaces and database have been developed with Microsoft C/C++, PowerBuilder (CHUI, GUI) as a 4GL tool for software development and Sybase SQL Server as RDBMS.

The following main functionality includes amongst others modules for:

- marketing and quotation;
- booking, allocation and forecasting;
- headquarters manifest control;
- hazardous cargo;
- materials handling equipment allocation;
- yard operations planning and guiding;
- reporting and administration.

2. Nizhny Novgorod, Russian Federation

Supply and modification of software for a computerised solution for the inland port of Nizhny Novgorod, Russian Federation.

The project and computer system objectives are:

- To implement a system capable of planning, management and tracking of containers, break bulk and general cargo.
- To meet the information needs of operational and administrative staff which are not fully met by the existing manual/computer systems.
- To speed up the operational processes and increase the productivity of the staff through the use of computerised facilities.
- To improve the quality of information available to the users.

3. Tracking and Tracing System of Cargo Items in Europe

The main function of the Internet Based Tracking and Tracing Application (eTRAIL) is to minimize the efforts required to obtain and distribute information about specific shipments.

Furthermore, the system presents up-to-date, accurate information on the whereabouts of the goods along the logistics chain, thus resulting in a close control of the entire supply chain to cut time and costs and to also raise service and quality standards for clients.

In concrete, a large volume of stock is moved to an earlier point in the supply chain to cut the amount of capital tied up in stocks.

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4. **EDI in Lithuania**

The project aims at improving the infrastructure and operational conditions with the following prime results:

- Establish a Basic EDI system for the Port of Klaipeda and its community.
- Supply EDI hard- and software, needed for the Basic EDI system and the integration with the ports' database(s) under development.
- To arrange in-house technical training of personnel servicing and operating the new systems and equipment delivered.
- To introduce and create awareness for the necessity for an EDI system within the Port of Klaipeda community.
- To assess, analyse and define local working environment requirements, e.g. local information exchange (needs), working procedures, infrastructure communications network etc.
- To prepare a design for an open, sustainable and full-fledged EDI Platform which can be used in different operational and administrative environments in the Port of Klaipeda.
- To make operational and managerial information available in the desired format at the appropriate time, which is needed for port efficiency.
- To make statistical information available for connection to the general database of Transport Sector Statistics Project (TSSP) for monitoring of the transport sector as a whole, by the Ministry of Transport (MoT).

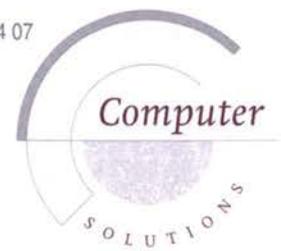
5. **EDI System Port of Ventspils, follow-up for Integrated Transport Information System (EDITRANS)**

The project aims at improving the infrastructure and operational conditions with the following prime results:

- Establish a Basic EDI system for the Port of Ventspils and its community.
- Supply EDI hard- and software, needed for the Port Community System and interfaces with customs and Latvian Railways.
- To arrange in-house technical training of personnel servicing and operating the new systems and equipment delivered.
- To introduce and create awareness for the necessity for an EDI system within Latvian Transport Sector.
- To assess, analyse and define local working environment requirements, e.g. local information exchange (needs), working procedures, infrastructure communications network etc.
- To organise a Short Sea transport platform for bilateral cargo flows by sea.
- To make statistical information available for connection to the general database of the Ministry of Transport (MoT).

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6. Design, delivery and installation of a Port Management Information System in the ports of Porto Grande and Porto Praia (Cape Verde Islands) and establishing a link for consolidation of data.

An integrated soft- and hardware package was supplied on a turnkey basis and installed in the ports of Porto Grande and Porto Praia. The operations staff was instructed for competent use and start-up support was given.

The Port Management Information System (PMIS) is a state of the art information system designed to facilitate the handling of general cargo and containers at port sites.

PMIS is a dedicated system that increases port efficiency by:

- Making (up-to-date) information real-time available in the desired format;
- Distributing information to all interested / authorized staff and clients;
- Facilitating planning and administration of terminal operations;
- Supporting managerial short and long term decision taking;
- Automation of day to day operations, therewith reducing the workload of staff.

7. Cargill Humberside Grain Terminal at The Port of Hull - UK

Computer Solutions automated in the UK an export terminal for grain. The project included the next functionality:

- Sampling station : Automatically samples are taken from the grain to be delivered by tube post system to the laboratory;
- Reception : Announcement of the truck driver; the sample is already analyzed, depending on the results the truckdriver is allowed to unload the truck;
- Laboratory : Input of analyzed results;
- Administration : Storage of contracts;
- Tipping weighbridges : Two weighbridge subsystems, connected with a Unix host;
- Central control room : Routing control, via an ethernet network;
- Host : Connected with AS/400 in London (exchange of contract information).

This system is built on a Unix computer basis, developed in Progress 4GL. For identification purposes, badges are used.

8. Metserv Port Kembla - Australia

Computer Solutions realized in Australia a project for a blast furnace. The project included stock control and the composition of the raw materials.

The system is based on a SCO Unix system with application software written in Progress 4GL.

There are connections to:

- 4 weighbridges for the dosing of raw materials;
- 2 subsystems for vehicle weighing;
- Wireless communication with touch screen terminals in the cranes;
- Terminals: Central control room, Scrap yard office and System administration.

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**9. Andrew's Fruit Wharf (AFW) at The Port of Zeebrugge - Belgium
Belgian New Fruit Wharf (BNFW - two sites) at The Port of Antwerp**

In Zeebrugge Belgium Computer Solutions delivered a logistic system for the handling of fruit on a new fruitterminal. Important features of this system are:

- Planning of ships and vehicles;
- Reception of vehicles;
- Automatic weighbridgecontrol by means of badge readers;
- Unloading of ships (boxcounting before and after greencheck);
- Automatic verification of vehicles per loaded pallet and after loading a check of the vehicle weight;
- Loading of trains and cold store;
- Collection of empty pallets and pallets barcode labeling.

The system is build around a Novell server with the Progress database running under control of the Novell operating system. The link between the office and the dock shelters is a glasfiber link. All workstations are built as intelligent Progress Clients. Badges are used for identification purposes. Loading of the vehicles is verified by means of long range laser scanners.

10. European Bulk Services at The Port of Rotterdam - The Netherlands

Computer Solutions developed a logistic system able to control the whole silo. The functionality includes:

- Transshipment of ships, trains and vehicles;
- Planning of ship unloading (in silo, direct transshipment etc.);
- Order administration;
- Silo stock control - on-line connection with vehicle weighbridges, which result in on-line stock updating.

11. Hylsa, Monterrey - Mexico

Computer Solutions has delivered in 1995 a 'scrap handling' system for Hylsa Flat Rolled Division in Monterrey, Mexico.

Heckett MultiServ, USA was the main contractor. The order, based upon an, in 1991 delivered system for the major steel company BHP, Port Kembla, Australia, has been placed in February 1994.

The project comprises of 6 especially designed flat form scales (capacity 200 ton - supplier Molen BV, Breda) and a control system (supplier Computer Solutions BV, Breda). The goal of the system is to optimize all operations on the scrap yard to produce scrap compositions at the lowest possible cost for the 4 existing en the 2 new furnaces (type Electrical Arc Furnaces). To achieve this goal, the logistic control of the 3 portal cranes and the 2 scrap carriers is done by means of touch screen terminals. The desired steel quality will be produced at the lowest cost, thanks to special developed algorithms.

All gathered data concerning the supplied scrap are passed on to the control system of the furnaces, through a connection to the Hylsa computer network, to calculate the quality of the steel to produce and as information for the management.

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12. **Monsanto Europe N.V. (Antwerpen) - Belgium**

Computer Solutions developed for Monsanto Europe N.V. in Antwerp Belgium a weighbridge control system, in- and outgoing freight is automatically registered on a mainframe in Brussels, running an invoice program. The custom made software interfaces with the present SAP Oracle RDBMS.

The system is working under Windows and uses a barcode reader, so the weighbridge operator only has to scan the barcode on the notice of arrival to start the weighing. The main characteristics of this system are:

- Operation instructions are simple so the system is easy to work with.
- Only relevant information is shown on the screen.
- Automatic processing of the weighing figures.
- The system is making use of the mainframe (invisible for the operator),
- When the mainframe is out of order, the system is buffering the data until the mainframe link is established again.

Computer Solutions developed a follow-up system for Monsanto Europe N.V. for the tracking of containers and vehicles for Monsanto Europe N.V. The system uses different workplaces in a Windows surrounding, giving numbers of empty or full containers, articles in it, where they are going etc.

Characteristics:

- Communication with the mainframe to prevent redundancy of the information.
- Position- and status report of every container.
- The system helps to select the best available container for a certain job.
- The location of the containers is done through the system.

The application is implemented on a LAN Manager network. This network is part of a huge IBM mainframe environment.

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B.2.1.5. Reference list Computer Solutions (non exhaustive)

Transshipment Companies

National:

(The Netherlands)

VAM	Wijster
IGMA	Amsterdam
EMO	Rotterdam
Huisvuilcentrale NH (HVC)	Alkmaar
Afval Verwerking Rijnmond	Rotterdam en Utrecht
Cereol Benelux	Utrecht
EBS (European Bulk Services)	Europoort / Rotterdam
Frans Maas	Venlo

International

Cargill	Hull / England
NoordNatie	Antwerpen
Mersey Docks	Liverpool / England
Vondelmolen	Lebbeke / Belgium
Andrew's Fruit Terminal (AFT)	Zeebrugge / Belgium
ABT	Antwerpen / Belgium
Bloemmolens van Geel	Geel / Belgium
Eurosilo / Ghent Grain Terminal	Gent / Belgium
Samga-Sobelgra	Antwerpen / Belgium
Silo A Cereales Du Port De Safi	Safi / Morocco
Leijsen Containerdienst	Beerse / Belgium
Igemo	Lier / Belgium
Belgian New Fruit Terminal (BNFW)	Antwerpen / Belgium
Indaver	Antwerpen / Belgium
WATCO	Beerse / Belgium
Porto Praia, Porto Grande	Cape Verdian Islands
CTO	Zeebrugge, Belgium
Port of Illychevsk	Ukraine
Port of Poti	Georgia
Port of Klaipeda	Lithuania
Port of Ventspils	Latvia

Steelindustry - scraphandling

MultiServ/Heckett – Hylsa	Monterrey / Mexico
Metserv/Heckett - B.H.P.	Port Kembla / Australia
MultiServ/Heckett - ACB	Bilbao / Spain

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Production Companies

**National
(The Netherlands)**

KNP/BT
Akzo
Hoogovens
Edelpapier
Triton Karton
Kappa Eskaboard
Hydro Agri
NAM
Alusta

Amsterdam
Arnhem
IJmuiden
Doetinchem
Pekela, Coevorden, Nieuweschans
Sappemeer, Hoogezand
Sluiskil
Emmen
Etten-Leur

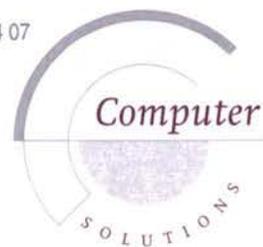
International:

Fina Raffinaderij
Monsanto
Beaulieu
ATF

Antwerpen / Belgium
Antwerpen / Belgium
Wielsbeke / Belgium
Zandvliet / Belgium

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B.2.2. Tractebel Development Engineering Standard Corporate Profiles

See Annex.

B.2.3. Parkman Standard Corporate Profiles

See Annex.

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B.2.4. eDOUcation Standard Corporate Profiles

eDOUcation has been founded in 1998. Before this time in the Netherlands hardly any specialised organisation existed for the training, guidance/consultancy and information in the field of Customs legislation and related issues on the non-governmental market.

eDOUcation works for Dutch and international companies and foreign governments.

The main business of eDOUcation is to design and organise training courses and to develop training materials. These training courses can be built out of our standard products or they can be tailor-made. For these training courses eDOUcation can make use of highly qualified specialists/trainers. Most of them are working in the Customs service.

Beside this eDOUcation offers guidance and consultancy for foreign companies or governments in the field of proces (re)design. In this case eDOUcation will conduct an inquiry to the flow of goods and the information needed by both the customer and Customs (based on existing legislation). Thus resulting in specific recommendations to facilitate the processes of both the customer and Customs.

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B.2.5. NIIT Standard Corporate Profiles

The Kazakh Research and Design Institute for Road Transport (KazNIPIAT) was established in 1956 on the basis of existing branch of the Moscow Research Institute for Road Transport. The Institute has passed through various stages of commercialisation, privatisation and diversification during its evolution.

In 1988 the Institute started to operate without state subsidies prior to full privatisation in 1992. In 1996 the Institute became a Joint Stock Company "Research Institute for Transport" (NIIT). The main accent of its activity now is study of different transport modes' problems.

More than 200 inventor's certificates and patents have been awarded to the Institute during its 40 years of scientific activity. Subsequently many of these innovations have been widely adopted by the transport enterprises. The cumulative knowledge acquired by the Institute through a wide variety of studies and investigations has been used to formulate strategic passenger and freight transport policy in Kazakstan, to assist transport legal reforms and to join Kazakstan to International Transport Conventions.

Our scientific and technical capabilities place the Institute in the forefront of transport technology in the CIS dealing with study of transport sector problems.

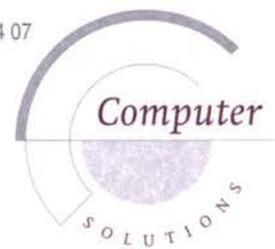
Principal activities of the Institute include:

- ❖ Preparing draft legislation and regulations for the transport sector;
- ❖ Institutional reforming of the transport sector;
- ❖ Multi-modal and combined transport;
- ❖ Creation and development of the transport corridor Europe - Asia;
- ❖ Management consultancy and business planning for transport enterprises;
- ❖ Technical maintenance and repair of vehicles;
- ❖ Developing methods for increasing fuel economy and reducing the toxicity of exhaust gas emissions;
- ❖ Promoting road safety;
- ❖ Observance of environmental standards in the transport sector;
- ❖ Developing certification systems in the transport sector.

For example, NIIT has developed and implemented in Kazakhstan and CIS:

- ❖ Passenger transportation organisation system on the principles of cost-recovery;
- ❖ Methodology recommendations for freight and passenger road transport privatisation;
- ❖ Methodology basis for transport legislation drafting in market environment;
- ❖ Progressive methods for road transport parts rehabilitation and manufacturing etc.

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NIIT together with its foreign partners participates in organisation and carrying out the seminars for local experts and enterprise managers training; in the nearest future it is planned to open its own Training Centre.

Due to its experience accumulated during 40 years of activity in the sphere of road transport problems, NIIT today has the unique position having at its disposal all necessary resources to meet the demands of its customers, being able to render various services with the necessary quality of works.

Since 1993 NIIT is actively working with foreign partners and customers on different projects in the transport sector. The main projects are the following:

- ❖ **1993-1995.** Organisation of Auctions for Trucks and Wholesale Trade Units. Prime contractor is Buz Alen and Hamilton, USA. Financing organisation is American Agency of International Development.
- ❖ **1994.** Restructuring and Privatisation of Trucking Industry. Prime contractor is Ernst and Young, USA, European branch. Financing organisation is the European Bank for Reconstruction and Development.
- ❖ **1994-1995.** Modernisation and Improvement of Urban Passenger Transport Performance. Prime contractor is WS Atkins International, Great Britain. Financing organisation is TACIS Program.
- ❖ **1995.** Technical Assistance on the Improvement of Transport Legislation in Kazakstan. Prime contractor is Scott Wilson Kirkpatrick, Great Britain. Financing organisation is TACIS Program.
- ❖ **1995.** Parallel Testing of Shell Motor Oils and Russian Motor Oils. Prime contractor is JSC NIIT. Financing organisation is Shell in Kazakstan.
- ❖ **1995-1997.** Institutional Strengthening of Urban Passenger Transport Performance in Kazakstan. Prime contractor is Louis Berger, USA, French branch. In 1997 the prime contractor is JSC NIIT. Financing organisation is the World Bank for Reconstruction and Development.
- ❖ **1995-1997.** Quality Control of Supplied Buses. Prime contractor is SGC, Switzerland. Financing organisation is the World Bank for Reconstruction and Development.

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- ❖ **1996-1998.** Aktau Sea Commercial Port Reconstruction. Prime contractor is APEC, Belgium. Financing organisation is the European Bank for Reconstruction and Development.
- ❖ **1996-1998.** TRACECA Projects (Transport Corridor Europe – Caucasus -Asia). Financing organisation is TACIS Program:
 - Transport Legislation Reform and Unification. Prime contractor is Scott Wilson Kirkpatrick, Great Britain;
 - Trade Assistance, Customs Procedures Simplification and Freight Forwarding Development. Prime contractor is Scott Wilson Kirkpatrick, Great Britain;
 - Improvement of Road Transport Performance. Prime contractor is Alexander Gibb, Great Britain;
 - Freight Flow Forecast. Railway and Road Corridors. Prime contractor is WS Atkins International, Great Britain;
 - Training Program for the Managers of High and Medium Levels. Prime contractor is NEA Consult, the Netherlands.
- ❖ **1997-2001** Almaty-Astana's Highway Rehabilitation. Prime contractor is Scott Wilson Kirkpatrick, Great Britain. Financing organisation is the World Bank for Reconstruction and Development.
- ❖ **1998-2000.** Traffic and Feasibility Studies. Prime contractor – BCEOM Societe Francaise D'Ingenierie. Financing organisation is TACIS Programme EC.
- ❖ **2000 – in progress.** Almaty-Astana's Highway Rehabilitation Supervision Project. Prime contractor is SMEC, Australia. Financing organisation is the World Bank for Reconstruction and Development.
- ❖ **2000- in progress.** Support to the Development of a Transit Corridors Policy in the Republic of Kazakhstan. Prime contractor – NEA Consulting, the Netherlands. Financing organisation – TACIS Programme.

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B.3. Understanding of the Terms of Reference

B.3.1. Comments on the Terms of Reference

In general, the terms of reference are quite clear in terms of project background, objectives, tasks and expected results. However, we do make the following comments to clarify or explain our approach in the organisation and methodologies, which follow.

The two project Modules are almost entirely unrelated in objectives, and content. There are practically no technical interdependencies between them. This is convenient for division of work between our firms.

B.3.1.1. Module A

At this stage the architecture of the system and the infrastructure (software and hardware) to be implemented can not be defined. During the inception phase the consultant will be able to design roughly the required architecture and infrastructure. However the system architecture proposed in the ToR will serve as a guideline for discussions with the beneficiaries and will be considered as indicative for the allocation of the budget.

Since Customs procedures are (partly) integrated in the system, the consultant will be able to specify the Customs procedures after having consulted the Customs authorities of the countries involved. *It may well be that for more or less the same procedures countries have various demands.* The specifications in the ToR will again be the guidelines for discussions.

B.3.1.2. Module B

The described Objectives of the module concern the *selected roads*, which elsewhere in the text of the terms of reference are described as being located between Tashkent and Osh. We have enquired of the task manager at the EBRD, and of responsible persons at Uzavtoyul in Uzbekistan, to try to determine where the selected roads are located. It appears that, while there has been a preliminary investigation by consultants to determine the most appropriate roads to include in the project, no clear decision has yet been taken on this question. Indeed, there appears to be quite a range of possible road sections for the eventual selection to be made from.

The consultants preparing this proposal are well aware of road conditions in Uzbekistan, but we must point out that these can be very variable, in terms of for example, pavement condition, functional adequacy to serve the expected traffic, number and condition of structures. Under these circumstances it is difficult to estimate with precision the exact technical resources, such as topographical survey teams and equipment to mention just one

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item, which may eventually be necessary to carry out the required studies. We have therefore had to be rather hesitant, limitative and generic in our proposal.

We do however point out that our firms do have available a full range of managerial and technical capabilities for the study of any road rehabilitation, reconstruction, or construction or bridge works that could be envisaged in Uzbekistan under the present project.

The terms of reference foresee that the final design will be carried out late in the project. It is a fact that the final design will not be required until issue of the contract documents, but in reality much of the required engineering work will have to be done earlier in the project, at the time of the feasibility study. This is because the processes to survey, design, and estimate quantities are today mostly computerised, and there is little economy to be made by abbreviating them. Furthermore, remobilization of the engineers for a second phase of activity in the field would be prohibitively expensive. If certain drawings are never finalised and issued for tender, because the sections are not included in the project, that is not a problem. However, we could not remobilize in a phase 2 for project scope changes beyond the boundaries of the scope foreseen at feasibility stage.

B.3.2. Comments on Facilities to be Provided by the Client

B.3.2.1. Module A

Customs procedures are no state secrets. However Customs authorities tend to be secretive about them, we expect co-operation in this field, on the accurate level of policy making. *When, in other words, specifications for local applications have to be discussed with local officials, upon the national policy on transit procedures the Customs central administration or even the Ministry has to agree.*

B.3.2.2. Module B

It is noted in Section 4.2.3.2 Administration and Logistics of the terms of reference that the Government of Uzbekistan will provide certain support and services to the contractor including but not limited to:

- ❖ All available data and information relating to the project;
- ❖ Office accommodation;
- ❖ Arrangements for visas and other administrative matters.

Our proposal is made on the basis that these provisions are granted promptly, so as not to delay our work schedule, and completely free of charge (except as noted for international telephone calls). In particular, much basic investigation as well as detailed work has been performed within the scope of the road project Andigan - Tashkent - Nukus - Kungrad, and we assume that we will be provided with free and open access to this information.

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Also, if it appears that additional traffic surveys are required to realise the feasibility study, we suppose that these surveys could be done by the Road Agency, Uzavtoyol, at their own costs. Our role would be to supervise the surveys and assure the quality control.

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B.4. Workplan

B.4.1. Critical Issues and General Approach

B.4.1.1. Importance of Continual Dialogue

In particular for Module A, we need to develop *with* our counter-parts (not *for* them), the supporting systems for improved border crossing procedures, which the strategic objectives of this project require. Computer Solutions feels that this project's activities and outputs, particularly for Module A, need to be developed on a participatory basis with the customs authorities concerned, as well eventually as with other stakeholders, such as local associations of road hauliers. This will ensure that the equipment and software to be provided under this project will be fully utilised to improve day to day working conditions at the borders, for all concerned.

We intend for our team to maintain a continual dialogue with counter-parts, by which we will orient actions to be taken, manage the procurement and commission as appropriate the equipment and software supplied.

The design of an effective technical assistance and equipment supply project such as this one

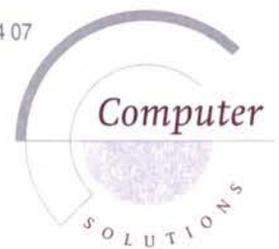
- ❖ Derives from a systematic diagnosis and needs-analysis process;
- ❖ Is demand-driven and has strong ownership on the part of the client;
- ❖ Is underpinned by strong management of procurement.

Based on our substantial experience in the TRACECA region, we believe that several features of our approach will be the key to a successful project. These success factors include:

- ❖ Our participatory approach to the project which will leave "ownership" of initiatives in the hands of the counterparts;
- ❖ The establishment of an exceptionally trusting working relationship between our team, the Project Director, and the customs committees;
- ❖ Our proposals of readily understood technical systems for the border crossings;
- ❖ Accordingly, every effort will be made by the individual team members - and by the Project Director at the outset of the project, who will carry a special responsibility for ensuring the establishment of a consensual approach acceptable to all counterparts.

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B.4.1.2. Importance of professional local IT experts

As mentioned under paragraph B.4.2.2 Implementation Procedures, the co-operation and integration of professional local IT experts is extremely important for the success of the project.

Indeed, these local experts are crucial for the maintenance of the installed system, after completion of the project by the consultant. From our experience we know that the motivation, education and training of these local experts is crucial for the success of the complete project and maintenance of the software.

The consultant will work together with the well-known Almaty transport consulting firm of NIIT.

NIIT is a local Institute in Kazakhstan, specialised in research, planning, design and management consultancy services in the transport sector.

NIIT will assist us in co-ordinating and managing the project and in software design and - if necessary - development.

B.4.1.3. Working Conditions

With our successful experience in the region, we are acutely sensitive to working conditions and to the importance of:

- ❖ Establishing close, friendly, informal and trusting **working relationships** with our counterparts - and this means working hard to break down the formalities and the social or institutional barriers which sometimes get in the way when professional experts from two very different cultural backgrounds meet;
- ❖ **Building the confidence** of our hosts in our advising and counselling impartiality - convincing our hosts that our work is in *their* interests; showing them that the work we do and the advice and information we provide is useful for the decisions and formidable tasks *they* face; showing a willingness to help them with advice in areas not necessarily listed in the TOR but which would help their overall technical and managerial development; and generally ensuring that they come to regard our team as being "on their side", a resource which serves not our but their purposes;
- ❖ Convincing senior managers that **information** given to us – some of it possibly regarded as sensitive, if not to us then to other government departments - will only be used in the interests of the services and will only be used to help to point the way to constructive solutions;
- ❖ Holding regular workshops, both formal and informal, **and keeping counterpart staff fully briefed** on where their work fits into the overall picture - making them feel part of the team.

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We have gone to considerable lengths to ensure that **our nominated staff are uniquely qualified**, not only with the highest standards of technical and management ability, but also - and especially - in terms of their personality, adaptability, enthusiasm and firm commitment to pursuing the over-riding objective of transferring their experience and wisdom into the design of the border equipment and software.

In addition - though this is not stated in the Terms of Reference - the services will be expected to reinforce communication and understanding between the TRACECA programme and the beneficiaries. With this project representing the continuing engagement of TRACECA in its program of contact and assistance our team can make a particularly useful contribution by:

- ❖ Helping reinforce common views of border crossing policy objectives and strategies between states;
- ❖ Helping to harmonise technical platforms for implementation of those policies.

B.4.1.4. Training

B.4.1.4.1. Module A

In accordance with the ToR, Section 2.2 'Project Purpose' and furtheron as required by task 4.1.1.12, the consultant will provide training to three levels of users / specialists:

- ❖ **Local IT specialists** will be involved in the design of the application software for the Automated Trade Facilitation System(s). We will familiarise the local IT experts with the methodology used for conceptual and technical design. The local IT specialists will - as far as possible - be trained into the internals of the installed hardware and software;
- ❖ **System administrators** will be trained to ensure a perfectly running system after our mission is completed;
- ❖ **The end-users** will be trained to operate the complete installed system.

Furthermore we will carefully take care to match the training with the capacities of every beneficiary.

We will encourage the training to be given at one central place, stimulating this way the contact between all parties of all countries involved in the project.

Of course the training sessions will provide training on procedures related to the system with emphasis on probable new or redesigned procedures.

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B.4.1.4.2. Module B

In complete conformity with Section 2.2 Project Purpose as described for Module B in the terms of reference, we will provide specific training to familiarise local staff and counter-parts with the overall methodology of a feasibility study such as the present one.

It is a fact that local roads authorities personnel do not spontaneously take a global view of their role as caretakers of their countries roads asset base, to be managed to serve national economic and social ends. They do tend to concentrate rather on network expansion and technical excellence as ends in themselves.

As HDM4 is now the standard tool for economic analysis within roads feasibility studies, and as HDM4 is also very adaptable to roads network management on a routine basis, a two day seminar on the principles and use of this software will be organised for the benefit of local staff and counter-parts.

Following this, HDM4 will be calibrated for (what is believed to be) its first application in Central Asia. Local staff and counterparts will be encouraged to participate fully in this process, and detailed know-how will be freely transferred to them.

B.4.1.5. Mobilisation - Module A

Immediately after the contract negotiations have been completed, Computer Solutions will start with the establishment of an office in Almaty.

In the mean time, the Project Manager will set up the guidelines for discussions with the counterparts and review all existing relevant reports, documents, recommendations, existing advisory and training work that will serve as a reference for this project.

Two weeks after the start of the project the Project Manager for Module A will take up residence in Almaty.

B.4.1.6. Mobilisation - Module B

The Consultants have sufficient contacts and knowledge of the country to be able to mobilise quickly.

Two weeks after the contract negotiations have been completed the Project Managers would be ready to take up residence and oversee the establishment of the main office in Tashkent (provided by the Client) and possibly a project office in Osh. It is anticipated that the work on the commission would effectively begin two weeks later, although considerable liaison and planning of the surveys would have been continuing in parallel. The mobilisation period, therefore, would be one month.

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B.4.1.7. Scope of work

B.4.1.7.1. Module A

For Module A, The ToR describes unequivocally the work to be done.

The equipment and software to be provided under this project will support and improve day to day working conditions at the borders of the beneficiary countries.

During the course of the project, the actual requirements will be defined in close co-operation with the beneficiaries. Computer Solutions has the perfect skills to meet these requirements, whenever it comes to procuring equipment and software.

B.4.1.7.2. Module B

For Module B, the Terms of Reference clearly describes the work to be undertaken and scope of the commission *but it does not define the length of road to be improved.*

The length of road will be determined, in due course, by agreement between EBRD and the Uzbek Government – presumably based on budget considerations.

In order to prepare this Tender, the Consultants have had to *assume* the length of road for which the required tasks can be carried out within the stated budget for the project.

The length of road has been assumed to be 75 Km and the number of bridges to be considered has been assumed to be 15.

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B.4.2. Workplan for Module A

B.4.2.1. Tasks

B.4.2.1.1. Project Initialisation

Immediately after the assignment, Computer Solutions has foreseen a project initialisation period of about 2 weeks for mobilisation and other preparative activities. This phase is essential for a smooth and efficient Inception Phase, within the limited time frame required. A guideline for discussions with the counterparts (e.g. Recipient Institutions, national customs' s agencies, etc.) will be prepared, working procedures will be established and all counterparts will be informed of the details of the methodology adopted for the Inception Phase.

Furthermore, during this period the consultant will review as much as possible all existing relevant reports, documents, recommendations, existing advisory and training work that will serve as a reference for this project.

Computer Solutions will set up an office in Almaty and organise and supervise the complete project from that central point, near the Kazakh and Kyrgyz border post. This location will ensure a close co-operation with NIIT also located in Almaty.

All involved local parties will be invited for a kick-off meeting to be held in Almaty, 2 weeks after the start of the project.

The duration of the Project Initialisation Phase is 2 weeks. Location is The Netherlands and Kazakhstan.

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B.4.2.1.2. Task 4.1.1.1 General diligence / start-up project

B.4.2.1.2.1. Objectives

At the start of the project, a general analysis will be carried out, comprising the following.

- ❖ The complete framework of the project will be addressed;
- ❖ The Customs procedures to be incorporated in the system (*including a choice whether or not to emphasise on TIR procedures*) will be addressed and described. The result of this will influence further actions/activities;
- ❖ The global functionality of the operations and procedures will be identified;
- ❖ The opinions of the local authorities regarding the automation will be collected and their perceptions and requirements for the future situation will be assessed;
- ❖ The local knowledge level will be addressed as starting point for the human resources development and training. The IT supplies should match with this local level of knowledge;
- ❖ A balanced apportionment of the budget to all supplies.

This phase is very important, because the complete framework will be fully demarcated and all starting points defined.

B.4.2.1.2.2. Method of Approach

The consultant will organise a kick-off meeting at one central place (Almaty) with all concerned beneficiaries and related parties. The following actions will take place.

- ❖ The consultant will explain and discuss with the complete attendance:
 - The predefined overall objectives of the project;
 - The global functionality of operations and procedures - as specified in the TRACECA Trade Facilitation Computer Systems Report Section 3.2. - Functional Specification - as starting point for the required functionality;
- ❖ The opinions and expectations of the attendees regarding the automation will be collected and their perceptions and requirements for the future situation will be assessed;
- ❖ The need for supplies will be discussed with all attendees, bearing in mind that a balanced apportionment of budget should take place between:
 - Enforcement and other equipment;
 - Automated trade facilitation systems;
 - General dispositions like communication equipment, emergency generators, uninterruptible power supplies, etc.

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- ❖ Existing IT and data processing systems will be inventoried and the possibilities and/or needs for integration will be addressed;
- ❖ Customs procedures will be examined and described;
- ❖ Integration of the Customs procedures at border crossings - as far as institutionally possible - with other controls, e.g. immigration, border security, etc. will be discussed;
- ❖ *The level of IT knowledge of the national customs agencies is a very important issue to be addressed; all IT supplies (software, hardware, training) should match perfectly with their skills.*

B.4.2.1.2.3. Reporting

In accordance with the requirements of the Terms of Reference, a detailed report will be drawn up as part of the inception report.

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B.4.2.1.3. Task 4.1.1.2 Review of relevant documents & work

B.4.2.1.3.1. Objectives

All existing relevant reports, documents, recommendations, existing advisory and training work will serve as a reference for the completion of this project and will facilitate the work of the consultant during the complete project.

B.4.2.1.3.2. Method of Approach

In this phase, the complete 'environment' of the future automated customs systems will be charted by studying existing plans for computerisation, interviewing all other possible users of the system and by reviewing all possible existing relevant documentation.

- ❖ The consultant will review all previous relevant and advisory training work, including those sponsored by TACIS, WTO and WCO, and we will consult the Eurocustoms project or its successor;
- ❖ The consultant will interview freight forwarders, Customs officials, licensed declarants of the system and other users of the system;
- ❖ The consultant will obtain and review national plans for customs development, computerisation and reports of the principle problems (as viewed by the national agencies).

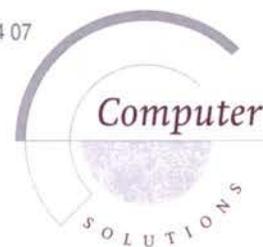
B.4.2.1.3.3. Reporting

This input will serve further to complete the inception report.

The report will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.4. Task 4.1.1.3 Local survey

B.4.2.1.4.1. Objectives

A local investigation will take place to have an accurate up-to-date picture of the concerned border crossings, inland terminals and Central Customs Agency Data processing facilities. Furtheron, a detailed picture should be acquired of the local circumstances concerning power supply, telecommunications capacity, and geographic layout of the buildings.

B.4.2.1.4.2. Method of Approach

The consultant is familiar with the local situation, as he made several visits to the local border crossings. However at the concerned network nodes some supplementary tests will be required.

At each concerned border crossing, inland terminals and Central Customs Agency, the consultant will make a survey of the following:

- ❖ The consultant will test the quality of the power supply with a voltage analyser (stability of the voltage level, spikes, drifting, etc.). These tests together with the required autonomy of the equipment to be installed, will result in a recommendation for:
 - The need for and type of uninterruptible power supplies (UPS) and back-up generators;
- ❖ The consultant will test the quality of the telephone lines with a data analyser (maximal bandwidth, throughput, stability, etc.);
These tests will result in a recommendation for:
 - The need for and type of telecommunications equipment;
 - The reliability of the concerned node;
- ❖ The consultant will make a general recommendation concerning the extra requirements for the IT equipment to be installed, e.g. RAID(>3) controller for hard disks, line filters, etc..

These recommendations should take care that complete IT system installed at a particular node:

- ❖ *In case of a power breakdown*, has a predictable autonomy;
- ❖ *In case of a breakdown of the telephone lines and/or the telecommunications*, can work independent with some limitations on the functionality;
- ❖ *In general*, will have a high predictable degree of robustness.

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B.4.2.1.4.3. Reporting

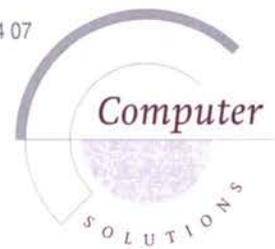
The consultant will make a report mentioning:

- ❖ The actual and required autonomy of the IT equipment installed at a particular node;
- ❖ The actual and required reliability of that particular node to the complete system;
- ❖ A list of recommended equipment (UPS, backup generators, telecommunications equipment, etc.);
- ❖ Extra recommendations for the IT equipment to be installed.

The report will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.5. Task 4.1.1.4 Liaise with the IJC-MLA

B.4.2.1.5.1. Objectives

The consultant will send a delegate to each IJC-MLA meeting (scheduled 2 times per year) to present and promote all technical, procedural and administrative proposals for Customs procedures in general and customs IT standardisation in particular.

B.4.2.1.5.2. Method of Approach

The overall objectives of the project are to improve the conditions for road transport on the most heavily trafficked section of the TRACECA route, concentrating on the road border crossings and inland terminals. In this context it is quite evident that the consultant will promote all technical, procedural and administrative proposals for customs IT standardisation to the IJC-MLA (Intergovernmental Joint Committee for the Implementation of the TRACECA Multi-Lateral Agreement).

At the first IJC-MLA meeting, the draft proposal of the report '*Recommended* customs procedures' will be proposed by the consultant. This report will be reviewed on the basis of the advice and comments of the IJC-MLA Committee.

B.4.2.1.5.3. Reporting

The consultant will prepare his attendance to the IJC-MLA meeting, by preparing a short presentation. All discussions of the IJC-MLA meeting will be reported.

All reporting will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.6. Task 4.1.1.5 Project Consultative Committee

B.4.2.1.6.1. Objectives

The consultant will form a Project Consultative Committee of experts from each country to consider and ensure regional technical compatibility issues at the customs officer level (data, architecture of IT system, procedures, etc.).

B.4.2.1.6.2. Method of Approach

- ❖ The consultant will form a consultative committee consisting of experts from each country:
 - Committee members will be typically heads of IT departments of the national customs committees or other informed and responsible customs officers;
 - Furtheron, others such as representatives of Eurocustoms, WCO, IRU, FIATA, national road freight transport organisations will be invited as observers or advisors;
- ❖ The consultant will organise such consultative committee several times during the course of the project at different locations; probably it will be the best to organise such committee in every beneficiary country, the first year;
- ❖ The consultant will stimulate free interchange of ideas between the countries at expert level, assist and encourage experts to make proposals (e.g. compatible data formats, systems for tracking of cargoes along the TRACECA route);
- ❖ Where political decision should be necessary to implement such systems or enforce standards, formal submissions will be made to the IJC-MLA;
- ❖ The consultative committee will (help to) design the training curricula. Trainees will be brought together - as far as practical - to one location to encourage regional integration.

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B.4.2.1.6.3. Tracking of cargo

Computer Solutions, has already realised an Internet based Tracking and Tracing Application for road transport (eTRAIL).

The web-enabled application facilitates the monitoring of cargo pickups, movements and deliveries along the logistics chain (*e.g. could be the TRACECA route*), connecting Consignor, Freight Forwarder, Carriers and Depot Operators. Consequently, a close control of the entire supply chain is possible to cut time and costs and to raise service and quality standards for clients.

The system facilitates a variety of methods of shipment such as direct shipment to the end-customer or shipment via intermediate depots (owned by e.g. a logistics service provider, another private organisation, etc.).

eTRAIL application offers several different types of authorised users an insight in the location and status of the (ordered) goods. Standard Internet Browsers such as MS Explorer and Netscape can be used. Depending on the pre-defined requirements and level of authorisation, the system presents different information to the various types of users.

This application is since 1 year in use by 'De Koninklijke Frans Maas Groep', one of the largest third party logistics provider in The Netherlands and Europe.

This proven application can serve as a basis pilot module for the tracking and tracing of cargoes along the TRACECA route.

For a description of the functionality of this system, we refer to the description in attachment to the technical proposal.

B.4.2.1.6.4. Reporting

All reporting of such consultative committee will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.7. Task 4.1.1.6 Conceptual design

B.4.2.1.7.1. Objectives

In collaboration with the consultative committee - a conceptual design for a flexible, regionally integrated, modular system for (eventual full) automation of the beneficiaries' national customs services has to be set up.

B.4.2.1.7.2. Method of Approach

The consultant will develop a conceptual design - in collaboration with the consultative committee - for a flexible, regionally integrated, modular system for (eventual full) automation of the beneficiaries' national customs services.

The consultant will take into account the recommendations of the consultative committee and the TRACECA Trade Facilitation Computer Systems Report.

The system (all modules) will be designed (conceptual and technical – see task 4.1.1.8) in an unequivocal way using *the standard methodology of Yourdon (YSM - Yourdon Structured Method)*. This methodology is an internationally accepted standard methodology for designing IT systems. *The YSM covers the activities of the organisation, as well as the system itself (enterprise requirements).*

B.4.2.1.7.3. Yourdon Structured Method (YSM)

The different phases of the YSM are the following:

1. Phase I: Feasibility study

- Looks at the present (existing) system and its environment;
- Obtain a general understanding of existing systems, procedures, requirements;
- Develop E-R diagrams (entity relation diagrams) and/or DFD' s (data flow diagrams);
- Investigation techniques: interviews, questionnaires, etc.

2. Phase II: Essential modelling

- Describes the essential elements of the required system plus detailed data;
- Contains two components: *The Environmental Model and The Behavioural Model;*
- The models describe:
 - What will the system do (DFD);
 - What happens when (event list);
 - What data is used by the system.

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2.1. Environmental Model

Defines the boundary between the system and the environment of the system;
Consists of event list and context diagram:

- Event list (can be flow-oriented, temporal or control event);
- Context diagram (as per usual);

Statement of purpose: provided for management.;

Brief, concise textual statement about the purpose of the system;

First-cut data dictionary and E-R diagrams.

2.2. Behavioural Model

Describes the internal behaviour of the system to deal successfully with the environment;

Includes:

- Data flow diagrams;
- E-R diagrams;
- State transition diagrams;
- Additions to the data dictionary.

3. Phase III: Implementation modelling

Incorporates:

- Determination of the boundaries of computerisation;
- Allocation of software environments to groups of processes;
- Choose RDBMS.

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B.4.2.1.7.4. Results

The results of this formal way of modelling will result in the following.

- ❖ The Environmental Model will specify the technical interfaces to be implemented by each country when they decide to set-up a regional, integrated automated system;
- ❖ The behaviour model will specify the procedures and all related functionality. In the phase of essential modelling the consultant will describe the actual procedures. He will also describe the procedures, using the automated system. The consultant will make a cost/benefit analysis, by using performance indicators for both situations, and an analysis of the implications in case an automated system is not in place. The consultant will furthermore propose criteria for this analysis.
- ❖ The Implementation Model will be used as a framework for the implementation of the individual modules in each country;

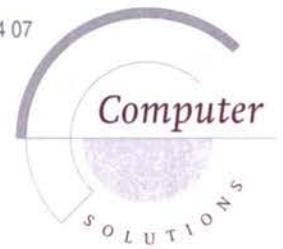
In this phase, only the global functionality will be defined using DFD' s and ERD' s.

B.4.2.1.7.5. Reporting

All reporting will be in accordance with the requirements of the Terms of Reference.

All technical reporting will be made in accordance to the conventions of the modelling technique used.

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B.4.2.1.8. Task 4.1.1.7 National Management IT Strategies

B.4.2.1.8.1. Objectives

The goal of this advisory task is to define and to secure the position of the present project as part of a long term IT management strategy in each country.

B.4.2.1.8.2. Method of Approach

The consultant will base his advice on the following information:

- ❖ Input from the Consultative Committee;
- ❖ Review of all previous relevant and advisory training work, including those sponsored by TACIS, WTO and WCO;
- ❖ Review of the national plans for customs development, computerisation, reports of the principle problems (as viewed by the national agencies);
- ❖ The TRACECA Trade Facilitation Computer Systems Report Section 3.2. - system Functional Specification.

On the basis of this information, the consultant will recommend an IT management strategy for each country.

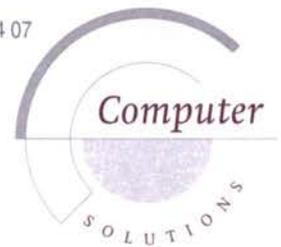
- ❖ This IT strategy will define how the overall management of computerisation should be undertaken in the longer term;
- ❖ The consultant will also define the role of the present project, as part of that overall long-term strategy for implementation.

B.4.2.1.8.3. Reporting

All reporting will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.9. Task 4.1.1.8 Border Crossing System Design

B.4.2.1.9.1. Objectives

The system has to be designed using an internationally accepted standard methodology for designing IT systems, offering a structural and surveyable presentation of the requirements of the IT system to be delivered.

This design will:

- ❖ Ease discussion between all concerned parties at all levels;
- ❖ Serve as a perfect basis for the implementation of the IT system.

The design has to made:

- ❖ In collaboration with the national authorities concerned;
- ❖ Taking into account the recommendations of the TRACECA Trade Facilitation Computer Systems Report.

B.4.2.1.9.2. Method of Approach

As already mentioned under the approach of Task 4.1.1.6 Conceptual design (on page 38), the system (all modules) will be designed (conceptual and technical) in an unequivocal way using the standard methodology of Yourdon (YSM - Yourdon Structured Method).

B.4.2.1.9.3. Functionality

As a guideline for the detailed functionality to be implemented will be taken the TRACECA Trade Facilitation Computer Systems Report Section 3.2. - System Functional Specification, as summarised below.

1. Brief details of the consignment are recorded by the customs at point of entry;
2. Approval to move inland is given;
3. Notification of expected arrival is sent by the border post to the regional office at which the declaration is to be presented, or to the exit border post for transit goods.
4. Declaration is presented at the regional office, or by direct trader input.
5. Declaration is checked and notification sent to the border post of entry, or to the central office.
6. Good in transit are presented at the border of exit, checked and notification sent.
7. Data is captured from the declaration and any errors corrected. Validity checks and revenue calculations are made and reported.

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8. Further checks as appropriate, decisions on physical checks necessary, etc.
9. Documentary and physical checks as decided prior to payment.
10. Payment made and goods released.
11. Contraband report issued if checks reveal non-conformity.
12. Reports are generated after a given period and displayed at locations concerned and central office. Discrepancies are reported and followed up if necessary.
13. Statistics are extracted from the system.
14. Post release audit checks are identified by system and records transferred to a management information module.
15. For reports, the same procedure would apply with initiation at the regional office.

The total functioning at the border of various checks and operations will be considered and the consultant will attempt to integrate such activities.

However, the above mentioned functionality will be considered as a guideline.

In practice the consultant - in consultation with the local authorities of the individual countries - will decide on hardware and software to be delivered **on a pilot basis for the border crossings designated.**

The consultant will take into consideration, the present equipment, existing commitment to software systems, the functions they wish to include, the declared IT management strategy and the available budget.

For countries that have opted for different systems, interfaces will be designed. *The building and implementation of this interfaces is not part of this project.* The level of integration - regionally, bi-lateral or multi-lateral - has to be decided on in the Consultative Committee.

Target processing times for trucks should be typically between 10 to 12 minutes. It is very important that this predefined performance indicator is defined and agreed on from the beginning at the level of the Consultative Committee.

B.4.2.1.9.4. Reporting

All reporting will be in accordance with the requirements of the Terms of Reference and in accordance with the standards recommended by the (standard) design methodology.

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B.4.2.1.10. Task 4.1.1.9 System Architecture

B.4.2.1.10.1. Objectives

Goal of this task is to set up and develop a flexible, modular and reliable architecture with easy-to-maintain components (hardware and software).

B.4.2.1.10.2. System Architecture

At this moment it is quite difficult to define the topology of the system. After the local survey and discussions with the beneficiaries the Consultant will be able to design the architecture and topology of the system. The system architecture proposed in the ToR will serve as a guideline for discussions with the beneficiaries.

However the architecture will depend on the present equipment, the existing commitment of the beneficiaries towards particular software systems and the declared (national) IT management strategy. The reason the architecture has and will be developed in close co-operation with all beneficiaries.

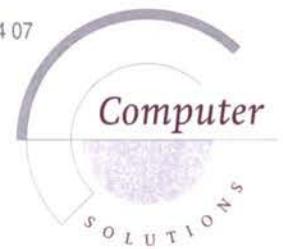
These factors will determine whenever the servers will be e.g. UNIX or Microsoft (NT or Windows 2000 server) based. The clients (workstations) will be most likely Microsoft based. For the RDBMS and other supporting software, it is very important to choose for an internationally accepted standard (e.g. Oracle, Informix, SQL server, Microsoft based, etc.). However, the above mentioned factors will also influence this choice. The type of routers, switches and modems will depend on the local telecommunications infrastructure.

B.4.2.1.10.3. Reporting

- ❖ For the network design schematics, the classical adopted conventions for network design will be used.
- ❖ All reporting will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.11. Task 4.1.1.10 Equipment selection

B.4.2.1.11.1. Objectives

The goal of this task is to select all equipment, in function of the requirements - being a result of all previous tasks - taking into account a balanced apportionment of the budget between:

- ❖ Automated trade facilitation systems;
- ❖ General dispositions like communication equipment, emergency generators, uninterruptible power supplies, etc.;
- ❖ Enforcement and other equipment.

B.4.2.1.11.2. Standards

Typical components will be the following or should comply with the following standards:

Hardware

- ❖ PC's (Win9x, Win2000 Professional, NT Workstation);
- ❖ Servers (UNIX, NT);
- ❖ Hub's & Routers (Cisco, 3Com, Hirshmann, etc.);
- ❖ Radio modems (Arlan, BreezCom, etc.), complying to the IEEE 802.11 standard (2.4 GHz Spread Spectrum operation - license-free installation in most countries);
- ❖ Modems (complying to V90/V92 standard);
- ❖ HDSL modems: High-bit-rate Digital Subscriber Line using ordinary phone lines – probably also IDSL and ADSL equipment has to be considered;
The use of xDSL technology will only be possible if the local regional telephone stations are capable of handling xDSL communications:
- ❖ UPS (APC, etc.);
- ❖ Back-up (standby) generators;
- ❖ Etc.

Cabling

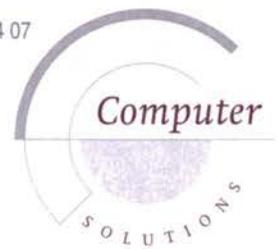
- ❖ By preference in accordance to the Cat5 standard (**Category 5** of TIA/EIA-568-A Recommendations).

Software

- ❖ The requirements will be defined in close co-operation with the beneficiaries. Computer Solutions has the skills to meet this requirements, whenever it comes to the procurement, testing, commissioning and training of standard application and supporting software or the development and implementation of bespoke application software.

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B.4.2.1.11.3. Method of Approach

The consultant will set up a list of equipment per node in the network.

This list is function of:

- ❖ Desired topology and architecture of the network;
- ❖ The state of the local telecommunication facilities and power supply;
- ❖ Existing equipment;
- ❖ Requirements of beneficiaries;
- ❖ Available budget,
- ❖ etc.

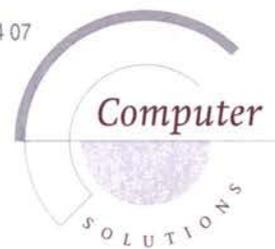
B.4.2.1.11.4. Reporting

- ❖ The list of required equipment will be drawn up per node;
- ❖ With all required equipment will be mentioned the applicable standard to which the equipment must conform.

All reporting will be further in accordance with the requirements of the Terms of Reference.

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B.4.2.1.12. Task 4.1.1.11 Procurement

B.4.2.1.12.1. Objectives

Procurement is a major component of this project. Procurement will be carried out in accordance with the procurement rules described in the manual "Manual of Instructions - Contracts for Works, Supplies and Services concluded for the purposes of community co-operation with third countries", reference number 'SEC(1999) 1801/2 - as adopted by the Commission in its meeting on 10/11/1999'.

B.4.2.1.12.2. Method of Approach

1. General

We divide the procurement needs of module A into two distinct exercises: The allocation of the supply budget should find a balance between all this supplies.

1.1. Automated trade facilitation system

- Procurement of the software;
- Procurement of the hardware (PC's, servers, radiomodems);
- Procurement of telecommunication equipment and general provisions (UPS, backup generators, modems, etc.).

1.2. Procurement of the enforcement equipment

2. Allocation of budget

- As a first action, a *first price estimate* will be made for all required equipment and services to be supplied;
- Allocation of budget to the different supplies and services will be in consultation with the local beneficiaries and the TACIS TASK manager.

3. Detailed specification

3.1. Automated trade facilitation system

▪ Software

Conceptual specifications prepared by the experts concerned with this project, and agreed with the beneficiary, will be submitted to our IT procurement specialist, who will prepare the detailed technical specifications.

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If any software has to developed explicitly for this project, Computer Solutions can do so. In this case Computer Solutions will make a detailed proposal and submit this proposal to the TASK manager for discussion and approval.

Local experts will be involved in any development of bespoke software.

This effort to develop this bespoke software will be specified as follows.

ITEM	# days
Technical design	
Module development	
Module testing	
Integration	
System testing	
FAT (Factory Acceptance Test)	
Solving outstanding problems	
Installation	
On-site testing	
SAT (Site Acceptance Test)	
Solving outstanding problems	
Commissioning	
Training	
Warranty (5%)	
Project management	
Contingency	
Total # days	
Price per day	
Total price	

- Computer equipment
A detailed specification will be set up. All specifications will refer to an applicable (international) standard (e.g. TIA/EIA for cabling, IEEE for radio modems, ITU for modems, etc.).
- General provisions
Telecommunication equipment, UPS, backup generators, HDSL modems, etc.
A detailed specification will be set up. All specifications will refer to an applicable (international) standard.

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▪ **Enforcement equipment**

A list with detailed specification of enforcement equipment will be set up by our customs expert. All specifications will refer to (as far as possible) an applicable (international) standard.

This equipment will include the following:

- Axle weigh pads;
- Drug kits;
- Infra-red document inspection equipment;
- Endoscopes;
- Search mirrors;
- Geiger counters;
- Office furniture, where essential for operations.

4. Publication of tender documents

The tender dossier including specifications and an evaluation matrix will be submitted to the Task Manager, along with a proposed notice for publication in the EU Official Journal. *Specifications will include delivery CIF to a central location (Biskek or Almaty).*

5. Evaluation

- An evaluation committee will be organised and the best offer will be recommended to the Task Manager for approval;
- The contracts will allow for inspection after delivery of material;
- *Fees for procurement activities will be included in the budget for the technical assistance.*

B.4.2.1.12.3. Responsible staff for the Task

- ❖ *Software (Conceptual & detailed specification and discussions with beneficiaries);*
 - Expert responsible for the database and modelling, and IT schematic design;
- ❖ *Computer equipment and General provisions (telecom equipment, UPS, backup generators, HDSL modems, etc.);*
 - Hardware specialist responsible for the design of the complete infrastructure;
- ❖ *Enforcement equipment;*
 - Customs expert;
- ❖ *Contract documents;*
 - Project administrator;
- ❖ *Evaluation and contracting;*
 - Project Director.

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B.4.2.1.12.4. Output of the Task

- ❖ Procurement of software, computer and telecommunications equipment, backup equipment, enforcement equipment.
- ❖ Supply to the beneficiary organisation.

B.4.2.1.12.5. Reporting

All specifications will be in accordance to internationally accepted standards.
All reporting will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.13. Task 4.1.1.12 Installation, commissioning, training

B.4.2.1.13.1. Objectives

Goal of this task is a proper installation and commissioning and to ensure that the beneficiaries are well trained, to be able to use the system and keep the system up and running in a perfect operational state.

B.4.2.1.13.2. Method of Approach

1. Installation

- The consultant will supervise the installation of all equipment; installation will be part of the procured deliveries;
- The cabling – being part of the procured deliveries - will be subcontracted by preference to a local company, but if not possible - due to a lack of knowledge or professionalism at the local market - to a Western company.

2. Testing

- The consultant, on the basis of predefined testing procedures will do the complete functionality and functioning of the system.

3. Commissioning

- After completion of a successful test, the consultant will hand the system to the beneficiaries.

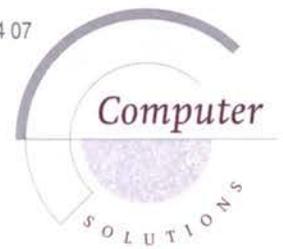
4. Training

- A complete training program will be set up for:
 - Trainers (train the trainer principle);
 - End-users (customs officers, etc.);
 - System administrators;
 - Local IT experts.

5. Deliveries

- Documentation and warranties will be delivered in English. ***If available on the market, they will be delivered also in Russian.*** It is almost impossible to translate all copious English documentation of equipment and basic software - if not available on the market in Russian - into Russian;
- Manuals, produced by the consultant or being part of the procured deliveries, will be delivered in English and Russian;
- Training will be given in English and Russian.

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6. Recommendations

- The consultant will make recommendations on:
 - Suitable remuneration levels;
 - Ongoing training programmes for required professional staff to operate and run the system delivered under this project.

B.4.2.1.13.3. Reporting

All reporting will be in accordance with the requirements of the Terms of Reference.

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B.4.2.1.14. Task 4.1.1.13 Follow-up Support

B.4.2.1.14.1. Objectives

The goal of this task is to secure a smooth start-up and professional support and backup to the users of the complete system.

B.4.2.1.14.2. Method of Approach

- ❖ The consultant will monitor during a period of 6 months after provisional acceptance of the equipment or commissioning of the systems (whichever is the latest):
 - The operational state of all equipment;
 - The proper operation of all computer equipment;
 - The usage of all equipment and systems;
- ❖ The consultant will advise and explain to the beneficiaries their rights under the warranties;
- ❖ The consultant will monitor the functioning of the system and report the impact of the project, by comparing the situation before and after the installation of said systems (*performance indicators on the procedural level*).

B.4.2.1.14.3. Reporting

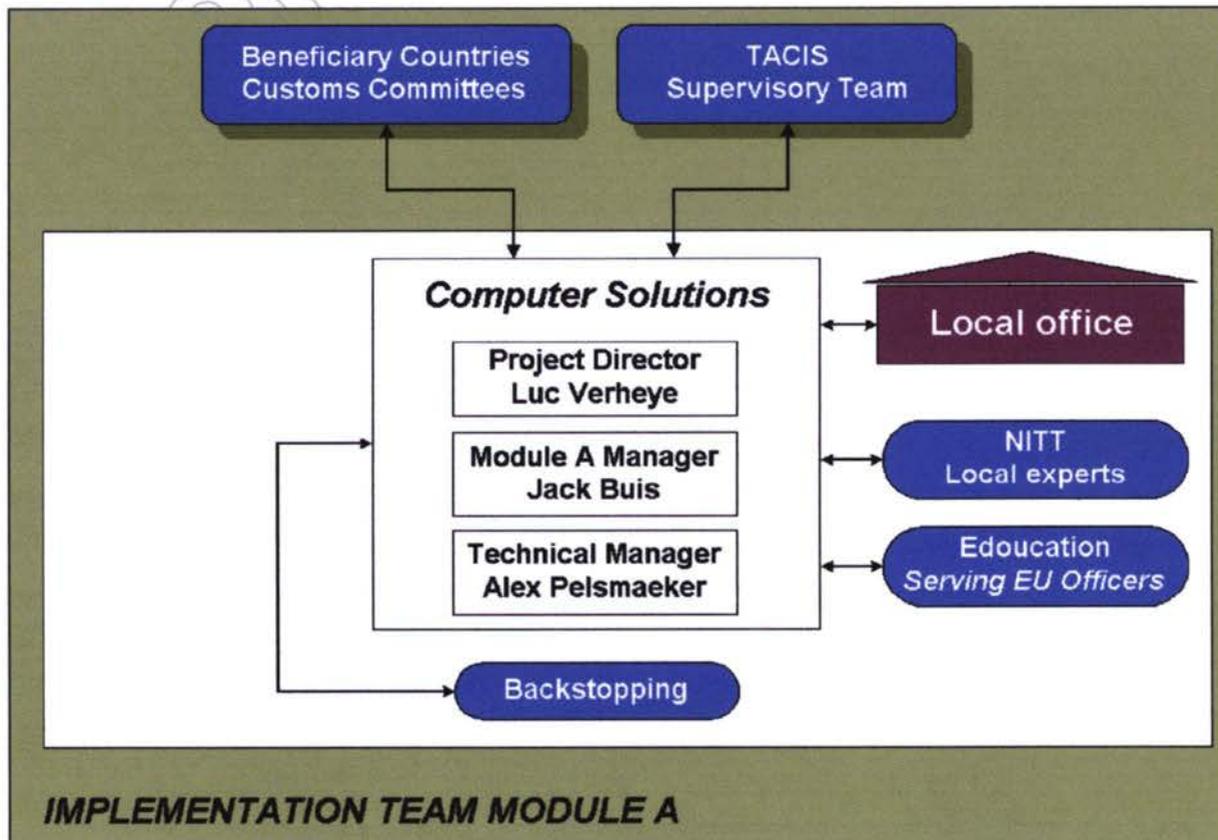
All reporting will be in accordance with the requirements of the Terms of Reference.

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B.4.2.2. Implementation Procedures

In the following graph, we give an overview of the complete implementation team for module A.

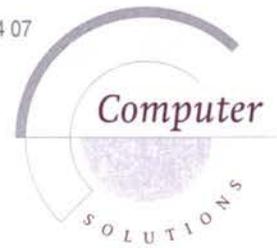


The implementation team has ***proven successful experience*** in the following fields:

- ❖ Management of TACIS supply contracts;
- ❖ Customs, trade facilitation and border crossing procedures;
- ❖ *To a large extent* in IT and telecommunications;
- ❖ Messaging technology (EDI in general, EDIFACT, XML).

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Most of the implementation procedures mentioned hereunder, are already described and implicitly taken into account in the tasks 4.1.1.1 till 4.1.1.13.

In particular:

- ❖ The consultant will set up a small local office in Almaty, to take care of all correspondence, translations, general office work, etc.;
- ❖ The consultant will maintain a small expatriate team and spent a maximum of time in the beneficiary countries – only tasks that can not done locally, will performed at the office of the consultant;
- ❖ The implementation team will involve to a maximum the local beneficiaries in every stage of the project as we mentioned already explicitly in paragraph B.4.1.1, Importance of Continual Dialogue;
- ❖ The consultant will together with local customs officers implement the changes in the customs border crossing-procedures.
- ❖ The consultant will work intensively together with local IT specialists (NIIT) - these specialists will be involved in the design of the software, installation and commissioning;
- ❖ For all supplies to be delivered the consultant will take care - as far as possible - of local support and warranty facilities.

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B.4.3. Workplan for Module B

B.4.3.1. Phase 1 – Feasibility

B.4.3.1.1. Task 4.2.1.2 Traffic Data

B.4.3.1.1.1. Objectives

The evaluation of selected road sections have been carried out at pre-feasibility level, that is to say on basis of existing and readily available data on traffic volumes. No specific traffic counts or O/D surveys have normally been realised for that purpose. The evaluation must now be done at feasibility level, and the objective of this task is to check if all data on traffic volumes are available at a sufficient level of detail and accuracy in order to perform the feasibility analysis.

B.4.3.1.1.2. Method of Approach

The method we propose to reach the objective of this component includes the following activities:

- ❖ review of previous traffic data used in the pre-feasibility study;
- ❖ check of all available traffic data (statistics, traffic counts by Uzavtoyol, surveys made for other road studies, O/D surveys, etc.) related to the project road;
- ❖ analysis to know if the locations of past traffic counts and size of available traffic data are representative enough;
- ❖ analysis of availability / adequacy of existing data in order to correctly evaluate:
 - the seasonal variations
 - the weekly variations
 - the diurnal patterns
 - the traffic volume by type of vehicles (5 to 6 types of vehicles should ideally used in the evaluation)
 - the repartition of traffic flows on the homogeneous segments to be considered for the project road
 - the calculation of AADT for each vehicle type corresponding to the base year used for the economic evaluation
- ❖ adequacy of data used / required to estimate the volume of diverted traffic from other roads in the corridor;
- ❖ analysis of the sensitivity analysis normally performed in the pre-feasibility study in order to estimate the sensitivity of EIRR to the volume of traffic at the base year. If it appears that the risk of making an evaluation mistake because the traffic data are not precise enough, we will conclude to the necessity of collecting additional data. The objective of this approach is to avoid launching time consuming traffic surveys that

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would not significantly increase the accuracy or the statistical representativity of existing data.

B.4.3.1.1.3. Outputs

Conclusions will be presented concerning the accuracy of available data and the necessity to carry out additional investigations. As required in the Terms of Reference, if additional traffic surveys of any kind are deemed necessary, full details will be given in the Inception Report together with proposals for carrying these out.

We understand that additional surveys, if necessary, will be carried out by Uzavtoyol, free of charge for the Consultant.

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B.4.3.1.2. Task 4.2.1.3: Road & Bridge Condition Surveys

B.4.3.1.2.1. Method of Approach

The Consultant will organise, manage and closely supervise the surveys from Tashkent and from an Osh project office. Although the majority of the survey work will be undertaken by local professional staff, The Consultant will design and manage the surveys and will be responsible for the results.

The Consultant's staff have already visited some of the roads between Tashkent and Osh and certain team members included in the Tender have considerable experience of Uzbekistan and its road network.

Pavement Survey:

Data from Pre-feasibility studies and other existing data will be fully utilised. The strength of the existing pavement (**over the selected length of 75Km**), where it remains intact, will be tested using Falling Weight Deflectometer together with associated physical observations and tests.

A visual detailed condition survey will be performed concurrently and note will be taken of drainage features. These surveys will give an indication of the state of the existing pavement, its integrity and strength, and will indicate the required overlay in areas where the sub-base is proved to be sound enough to sustain the pavement.

In areas where the sub-base has failed, or otherwise is shown to be inadequate, then the pavement testing will be irrelevant – full reconstruction will be required.

Bridge & Structures Condition Survey:

Data from Pre-feasibility studies and other existing data will be fully utilised. A bridge condition survey will be undertaken (**on up to 15 structures**) according to the ToR. This will assess bridge component's condition and estimate load carrying capabilities and future life. It will not include "major" structures such as large river crossings, long viaducts or rail over bridges.

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Retaining Walls:

The Consultant will critically review the need for new retaining structures, their form and any proposed rehabilitation of existing structures.

The principles of the review assessment will be agreed with EBRD. It might, for example, be determined, at certain locations, that it is not worth the cost of retaining structures only in order to improve visibility - desirable though this might be in general, it could be of little value if similar sub-standard sections exist on either side of it. Signing would be provided if standards are lowered.

A consistent approach will be maintained throughout the length of the route so that the criteria for the value obtained from any investment in improvements is similar from one location to another and for improvements of different types, e.g.: road width, vertical/horizontal alignment, visibility, safety, land expropriation, environmental considerations etc. The Consultant will develop a 'value for money' methodology which delivers this objective.

The paramount reason for retaining walls should be:

- to maintain the structural integrity of the sub-base;
- to protect the road from subsidence, earth slips and rock falls and;
- to avoid the need for large cuttings and embankments in sidelong ground.

The Consultant will review all the sections where there may be a need for new or rehabilitated retaining walls. We will assess the relative benefits which each section of wall is providing and judge its value. We will assess the applicability of other forms of earth retaining structures – such as reinforced concrete walls, gabions and earth reinforced structures.

Bridges:

From our past site visits it appears that, in general, the condition of other structures along the route is fair to good. **It is anticipated that only minor remedial works will be required on the structures – barrier repairs, plinth rebuilding, etc.**

Bridge assessment, preliminary design and the costing of proposed repairs / rehabilitation will be based on a visual inspection by an experienced engineer. **It is not our intention to conduct extensive bridge testing and assessment in order to demonstrate the condition and load bearing capabilities of the structures.**

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A pragmatic approach will be taken to the improvement of these structures having regard to budgetary constraints. The Consultant will however highlight any specific problems that represent a hazard to the traffic using the route.

Small to medium sized structures are either reinforced concrete (rc) slab, precast U-beams with in-situ rc top slab or steel beams with in-situ rc top slab on mass concrete or rc abutments – usually on rudimentary bearings. These are, again, apparently in fair condition and it is assumed that most will require no major remedial works. Repairs will probably be restricted to concrete patching, the repair of the edge-beam plinths and/or upstands and the installation of new guard rails or safety barriers.

The existing bridges will not, in general, be widened - extending the lengths of abutments and the addition of new decking are considered excessive costs. Hence there may need to be an approved, "departure from standards", formally agreed by the Ministry, at each structure where the road cross-section is reduced.

On many sections of these roads, the width of the existing structures will permit a road cross-section of around 6 – 6.5 metres between parapet plinths, therefore the carriageway lane width would reduce on the approach to the structure *and the hard shoulder (1.5 metres) would be discontinuous – stopping either side of the bridges.* Although each case will need to be assessed individually, it is considered that these reductions in the road width, are not likely to result in significant safety problems.

Culverts:

Culverts can be easily and cheaply extended to maintain the standard road cross-section. It is not envisaged that there will be any departures from standards at the many minor stream and drainage culverts.

Culverts would be extended, if necessary, either by additional lengths of in-situ, reinforced concrete (rc), box section or by sections of pre-cast, rc, box section. It will be usual to extend only on one side – when the corridor is widened on one side. Head walls will be repaired as necessary and safety barriers or guard railing re-installed on the plinths or up-stands. Waterproofing and surfacing would be re-established as the adjacent road pavement is rebuilt.

B.4.3.1.2.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference.

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B.4.3.1.3. Tasks 4.2.1.4: Topographical Survey

B.4.3.1.3.1. Method of Approach

There are a number of options for obtaining the necessary topographical information.

Existing aerial photography is not thought to be available and the bureaucratic problems of obtaining permission to fly the route to obtain fresh aerial photography are considered to be too great and the likely time-scale too long.

The topographical survey is critical to the production of the detailed design and contract documents. It is assumed that, given the budget, only a simple centre-line string will be established (probably using GPS, - with widely spaced local contour levels also measured - at intervals depending on the terrain).

Site surveys and assessment by specialists will determine the extent and frequency of cross-sections to be surveyed and the need for alignment improvements. Detailed local surveys would be undertaken as necessary at these junction improvements, etc.

This will result in the contract documents consisting only of “typical” cross-sections for specified types of terrain. The contract documents will not contain detailed, accurate, cross sections at regular intervals.

We would endeavour to obtain existing contoured background mapping for the selected sections of road. Purchase of satellite photographs would be an additional cost but would improve accuracy.

The Consultant staff will undertake the centreline GPS survey but it is proposed that the majority of the topo surveying will be undertaken by local staff under close supervision by The Consultant staff. Local staff will input the results of their Total Station topographical survey of the routes and will build up the digital ground model in the corridor of interest. On this contoured background they will then superimpose the preliminary vertical and horizontal alignment designs, prepared together with The Consultant engineers.

The cost of an aerial survey (or full Total Station ground survey) is not included in this Tender and would be an additional cost.

B.4.3.1.3.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference

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B.4.3.1.4. Tasks 4.2.1.5: Geotechnical Survey

B.4.3.1.4.1. Method of Approach

On the sections where specific improvements are needed, and the design is required in more detail, a geotechnical soil survey will be undertaken to provide the data needed for preliminary design. It will entail the drilling of bore-holes at regular intervals down the line of the route and, perhaps, the excavation of trial pits. It will also include bore-holes at the bridge and retaining wall sites at the position of the substructures.

Local staff specialists will perform the geotechnical survey. Because of the tight programme it will be necessary to initiate this work before all geometric design decisions are finalised and therefore a subsequent phase of the geotechnical investigation may be necessary. Local staff will oversee the necessary laboratory testing of the samples and cores and their geotechnical engineer will review the Interpretative Reports.

The surveys will also include the location and testing of sources of materials for road construction, and an assessment of the quantities needed, and available, for the road construction. It will give details of the identified borrow pits with the likely excavation volumes, thickness of overburden, diagrams of the utilisation/excavation sequence, laboratory test results and statistics.

B.4.3.1.4.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference.

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B.4.3.1.5. Task 4.2.1.6: Preliminary Designs & Estimates

B.4.3.1.5.1. Method of Approach

Road Design:

It will be necessary, first, to take fundamental decisions regarding standards:

a) Choice of Cross section

The cross-section will be determined by the forecast traffic flows in the design year. These flows will dictate the carriageway cross-section. Number of lanes etc, and the standards required at the interchanges. The Consultant would, in principle, favour a continuation of the standards adopted successfully for other adjacent sections of road improvement.

b) Design of Junctions

Traffic turning counts and Origin / Destination surveys (if available or undertaken) will give some indication of the capacity needed at each junction and hence its standard. The selected design standards will give precise criteria for the type and standard of junction.

c) Sight Lines and Horizontal and Vertical Geometry

These will depend on the selection of the appropriate Design Speed. We would be inclined to use the Uzbek standards and, again, make the rehabilitated roads similar in overall standards to the adjacent sections (mainly to avoid sharp changes in standards which tend to lead to accidents).

In general it is expected that the road will be improved and rehabilitated on its existing line – using, to a great extent, the existing sub-base. There may be a justification, however, for:

Small alignment improvements:

The Consultant will assess the need for realignments of the road in order to improve operating speeds and safety.

It will be imperative to balance standards, safety and cost in an efficient manner and to achieve optimum value for money. Route realignments and small local diversions will be selected pragmatically - based on the available budget. The evaluation will be undertaken in close consultation with local staff and the Ministry.

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For example, it may be decided to leave existing sub-standard features (bends, sight lines, etc) without significant improvement or realignment in order to save costs, but mitigated with additional warning signs and road marking.

Pavement Design:

Prior to commencement of the pavement design The Consultant will carry out a review of our experiences gained to date on similar projects in Kyrgyzstan, Uzbekistan and other central Republics. The Consultant is experienced in the use of local materials and our local staff will have in depth knowledge of the location and availability of sources of the common road building aggregates. This knowledge will be utilised to formulate the approach to the likely pavement design that will give the right balance between performance and economy incorporating any improvements that can be made in light of the continuing road construction programme in and around the region.

In common with other elements of the design it is envisaged that pavement design will be carried out in accordance with the selected Western European standards after a comparison has been made with the existing Russian standards. Parkman has determined on previous contracts the standards which are appropriate for Uzbekistan. However a review will be carried out of the design output against other standards, including the American AASHTO and the semi-empirical methods used in the United Kingdom, and also with regard to published research by Transport Research Laboratory (UK).

The pavement design will be developed based on FWD surveys, associated tests and inspections. Axle weights of vehicles vary from country to country as does the degree to which vehicles are illegally overloaded. The axle weight survey will give some indication of current loadings but this may not be a very reliable indicator of future loadings.

Having carried out the design process The Consultant will establish a specification for the works that will include for sampling and testing of both the raw materials used and the finished product. The compliance with the design by the constructors is of great importance to the performance of the pavement and our approach will reflect both this and the relatively low level of historical data available on which to base approval of the finished product. The Consultant will review the available information and make allowances accordingly within their design.

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There may be environmental issues arising from the choice of construction materials or the extraction site – these will be fully addressed in the Environmental Impact Appraisal.

The Consultant will make use of the forecast traffic flows in the pavement design. The Consultant will discuss and agree with the Ministry their requirements for design life of the pavement and advise on the long term maintenance implications of the chosen strategy possibly in the format of a value-engineering workshop undertaken jointly by The Consultant and Ministry personnel.

Cost Estimates:

The calculation of quantities and cost estimates will be prepared in accordance with the accuracy specified in the ToR.

[It should be noted however that the true accuracy of the estimates is a function of the topographical survey specification. The budget for this scheme is not adequate to undertake full aerial surveys or complete Total Station surveys therefore the accuracy of the estimates will be commensurate with our proposals given above.]

The use of computer based design methods will enable accurate calculations of quantities to be made – the costs will be estimated from an itemised bill of quantities.

The estimate is the basis of the economic analysis and will inform judgements about whether, and how, the project should be progressed. At this stage it is as important as the engineering.

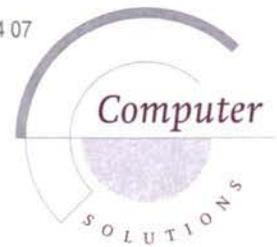
Each alternative will be costed for each section of the road to allow priorities to be assigned for phasing the works. Necessary works to the major structures will be costed separately. A maintenance cost (yearly) will emerge from the detailed maintenance plan. The capital and running costs for the Border Crossing posts *could* also be estimated. Other associated costs such as environmental mitigation etc will be assessed and calculated when the preliminary design is completed.

B.4.3.1.5.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference.

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B.4.3.1.6. Task 4.2.1.7: Environmental Investigations

B.4.3.1.6.1. Method of Approach

Although it is not envisaged that the proposed improvements, reconstruction and rehabilitation will pose a significant threat to the environment or result in any significant *new* impacts, it will be important to demonstrate that the appraisal has been conducted thoroughly and in accordance with recognised European standards. Mitigation measures to reduce the future impact of the road and its traffic on the environment and local communities would be suggested.

There will be some environmental impact during construction, however, for example on water courses and in areas of extraction of road materials. These will be investigated and reported in an Environmental Impact Appraisal – with proposals for minimising the impacts and recommended clauses for the works contract to control and constrain the contractor during the works.

Project environmental appraisal methods

The EC Directives demand in depth appraisal of a project at critical stages and a proscribed list of potential effects must be fully assessed and an Environmental Impact Appraisal (EIA) published. The Consultant has prepared many such documents, which have included assessments of various areas **if shown to be significant** – including:

<i>Ecological impact (flora and fauna)</i>	<i>Landscaping earth mounding</i>
<i>Agricultural impact</i>	<i>Tree and shrub planting</i>
<i>Air pollution</i>	<i>Archaeological impact</i>
<i>Visual intrusion</i>	<i>Heritage impact</i>
<i>Traffic impact/forecasts</i>	<i>Potential mitigation measures</i>
<i>Noise pollution</i>	<i>Severance and community effects</i>
<i>Water quality/drainage regimes</i>	

These appraisals would establish the "baseline", existing conditions (usually by surveys). It will then be assessed, by modelling, calculation and forecasts, how they would be affected by the proposed scheme and the predicted traffic growth.

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It will also lead to the development of practical and effective mitigation measures to reduce some of the environmental impacts. Such measures may include:

- earth mounding and special fencing to reduce noise adjacent to villages and residential property;
- shrub and tree planting within the highway boundary (and outside on private land) to reduce visual impact;
- oil interceptor traps to reduce pollution of water courses.

It should be recognised that many of these measures will require additional land in order for them to be properly implemented. The Consultant considers that, as *on similar projects in Western Europe*, the acquisition of this extra land and the additional cost should be regarded as, potentially, an essential part of the scheme.

Although the overall impact of the rehabilitated road is not likely to be severe on existing flora or fauna the effects of construction, however, may be substantial. They will be considered in details in an Environmental Assessment – to EBRD's Environmental Category B.. This will present proposals for minimising the impact of construction and the extraction of minerals.

Hydrological Survey:

The large volumes of water run-off from the mountains creates severe erosion conditions in the valleys. The volumes are short lived but need to be carefully considered in the design of the necessary structures. Any section of the route adjacent to these flows will need to be protected. The Consultant will review the existing design and will undertake an hydrological analysis to gauge the risks. In villages the rivers/streams would be placed in culverts; in the mountainous areas the flows would be in deep, steep sided gorges which may need to be spanned.

The hydrological survey will review the existing statistical data and The Consultant will analyse the information to make predictions about the peak, recurrent flood conditions. It will probably be appropriate to design rehabilitated bridge structures for a 1 in 100 years storm.

All the hydrological data and analysis/calculations will be summarised, with the assumptions to be applied in the design of the drainage system for the rehabilitated road and the structures.

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Although most existing drainage structures are in relatively acceptable condition, it is considered, based on our site visits to some roads in the corridor, that there may be a need for additional protection such as groynes, scour protection gabions or reinforced concrete walls for the road and its sub-base in river valleys, where the road is adjacent to a river

Local expertise will be of particular benefit in this specific task.

B.4.3.1.6.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference.

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B.4.3.1.7. Task 4.2.1.8: Economic Evaluations

B.4.3.1.7.1. Objectives

The main objective of this task is to prepare an economic evaluation of the projected road sections at feasibility level following a methodology generally accepted by International Organisations. We plan to use the methodology as used in the pre-feasibility study, unless we think that some adjustment must be done. This economic evaluation will contain all required information so that these organisations might finance the project without delay.

B.4.3.1.7.2. Method of Approach

The methodology we plan to use for the economic evaluation is called the “social surplus approach”.

The annual costs will be calculated on a yearly basis over a period of 20 years, in the “with project” and “without project” situations. The difference of costs between these two situations will result in a flow of annual costs and benefits.

The main expected benefits will be:

- ❖ vehicle operating cost savings;
- ❖ time savings for road users (passengers and products);
- ❖ savings from accident reduction;
- ❖ savings in alternative transport costs thanks to traffic diverted from other modes to the project road;
- ❖ savings in road maintenance costs.

The main costs to be considered are:

- ❖ road investment cost (including construction costs, detailed engineering studies, work supervision, contingencies, etc.);
- ❖ costs of environment mitigation measures, if any;
- ❖ a residual value of investment cost at the end of the evaluation period will be taken into account.

The vehicle operating costs will be calculated using the submodel VOC from the HDM model, developed by the World Bank. This model requires data on road roughness in the with and without situations. In the present situation, the international index of pavement roughness (IRI) will be estimated on basis of a visual inspection, not measures. Estimates of VOC will be done for 5 to 6 types of vehicles separately.

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The traffic volume on the road between Tashkent and Osh is very high in some sections (more than 10,000 AADT), so that congestion problems may exist. The economic benefits related to congestion aspects will be evaluated and quantified using the Highway Capacity Manual (HCM) procedures. We plan to use the HCM software for this purpose.

All prices will be first calculated on basis of market prices, and then will be adjusted to reflect the real cost to society. All inputs will be valued at efficiency (or shadow) prices, excluding all internal transfers such as taxes, import duties, licence fees, state levies, subsidies, etc.

The wage rate which will be used is the opportunity cost of labour. For this purpose, a difference will be made between skilled and unskilled labour.

In order to calculate these annual costs and benefits, it will be necessary to prepare traffic forecasts. This will be done on basis of historical traffic data (last 5 years), if available and deemed reliable, or on basis of traffic growth factors usually observed in the country or other indicators like fuel consumption, national fleet, economic indexes, population growth. A clear distinction will be made between the normal traffic, the generated traffic, the diverted traffic from other roads, and the diverted traffic from other modes of transport if any.

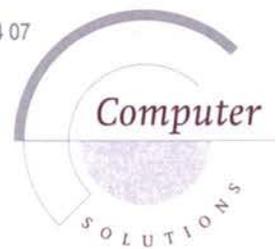
If various design alternatives are possible from a technical viewpoint, they will be compared on basis of their respective NPV. The alternative having the higher NPV would be selected, but other considerations could also be taken into account.

B.4.3.1.7.3. Outputs

The main outputs of the economic evaluation will be :

- ❖ the Economic Internal Rate of Return (EIRR) for each homogeneous sections and the whole project;
- ❖ the Net Present Value (NPV) using a discount rate of 12% per year for each homogeneous sections and the whole project;
- ❖ the First Year Benefit (FYB) ratio;
- ❖ the determination of the optimal year for initiation of the project;
- ❖ the evaluation of the alternative sequence of betterment of the road for the purpose of determining which of them would maximise the net present value of the project;
- ❖ a comparison analysis between main design alternatives;
- ❖ a sensitivity analysis of results obtained to variation of most important variables;
- ❖ a risk analysis, using the Monte Carlo techniques, if deemed necessary;
- ❖ a breakdown of the total NPV into the main costs and benefits of the project;
- ❖ a breakdown of the total NPV into the main types of vehicles.

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The information used in the economic evaluation will be presented in such a manner that it will be possible to reconstruct the results obtained. The report produced will be illustrated with graphs and tables with clear indications of units, sources, etc.

The economic evaluation will lead to detailed recommendations and prioritisation of the investment project.

B.4.3.1.8. Task 4.2.1.9: Reporting

Reporting will be in accordance with the ToR.

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B.4.3.2. Phase 2 – Detailed Engineering & Tender Documents

B.4.3.2.1. Task 4.2.2.1: Detailed Engineering Design

B.4.3.2.1.1. Method of Approach

The detailed design will proceed from Phase I and the information emerging from the continuing surveys. The Design Standards will have been agreed in Phase I. Localised small improvements and any diversions off-line will have been agreed in Phase I. Most interchanges will be at-grade, priority junctions (with full signing and road markings); the need for any higher standard junctions will have been agreed in Phase I.

Parkman has been responsible for the design of many major highway projects in the UK and world-wide. Most of these have been designed using Infracore Systems Ltd MX software. (Previously known as MOSS). This software is central to Parkman's design capability. It provides versatile tools, which lend themselves to large and small scale rehabilitations and designs.

MX software uses digital ground models (DGMs) which are produced from total station or GPS topographical string surveys, or derived for aerial photographic methods, input via OPTIMAL software. Onto these DGMs can be superimposed the vertical and horizontal alignment designs of the road or other civil engineering development projects.

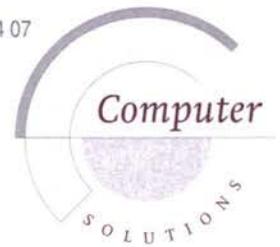
MX Software enables a proposed road or development scheme to be overlaid onto the existing contours; cross-sections and quantities of earthworks and construction materials can be determined; generated 3-dimensional images aid understanding and the clear presentation of results. High quality, high-resolution drawings can be produced to the standard required for contract documents.

This specialist Software is compatible with many other computer software systems (such as AutoCad, Leap 5, ICEPAC) and can be used in Geographical Information Systems. It is an extremely flexible tool but it needs considerable knowledge, experience and skill to exploit its full potential. The Consultant has the necessary capabilities and expertise in-house. MX Software has been used by Parkman for many years and as the software systems have developed so too have the capabilities of the company's engineers.

The Consultant staff have wide experience of all stages and all aspects of highway design: from conception and feasibility studies, through traffic, topographical, environmental, drainage and geotechnical surveys, liaison with affected bodies, economic analysis and final detailed design to the preparation of contract documents.

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These capabilities will be essential on this project to ensure that the Ministry obtains not only the highest quality assessment and design but also a product which is value for money and meets the demanding programme.

Local staff have previously worked with The Consultant's design staff.

- ❖ The Consultant's Project Manager will be permanently based in Tashkent for the whole of the commission. He will be supported by various specialist staff throughout the commission.
- ❖ Local project staff would be continuously assisted by The Consultant's specialists in Tashkent and Osh.
- ❖ On-the-job training and technological transfer will be on-going all the time during the commission.

Utilities:

Although the cost of utility service diversions will probably not be a major element of the project total costs it is expected that the existing records cannot be relied upon. The Consultant will engage in early liaisons with the utility companies and organisations to attempt to determine the lines of all the main services.

If trial pits are deemed by Ministry and the Utility Companies to be needed (to locate accurately the main utilities in some areas) then we recommend that they are carried out as part of the Soils and Materials Investigation survey.

The scheme is an opportunity to make prudent provision for services in the future – crossings under the road in ducts and culverts *and alongside the road in the verges*, particularly through the towns and villages, will be recommended as appropriate.

Road Signs and Markings:

The overall capacity of the road will increase with the reconstruction and rehabilitation. The average vehicle speed will rise but the mix of slower, local traffic and faster "through traffic" will give rise to greater speed differentials. Priority at-grade junctions and the many direct accesses onto the road will be designed to promote safety.

The average driver's appreciation of safety, road education and awareness of non-vehicular traffic will remain relatively undeveloped and accident rates will tend to rise as speeds increase. Accident numbers will rise as traffic flows increase.

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It is The Consultant's view that the cost of full European standard, carriageway markings and road signs should be considered as an essential element of the scheme and not as an "extra" to be added later. It is our view that it is, in principle, not justified to undertake road improvement schemes which simply deliver faster traffic flow but do not address safety problems and give safety benefits for local people and non-vehicular traffic.

There will remain many sub-optimal features on these roads and it will become more important to sign them adequately, and draw them to the attention of drivers, when the overall standard of the road is being improved. *As speeds increase on the full standard, improved sections of road, these few remaining sub-standard features can become a greater risk for vehicular traffic if they are not sign-posted..*

Most accidents occur through driver error and the source of most misjudgements is the unexpected. We cannot mitigate against unexpected events (children running into the road, for example, where the road goes through a village) but we can warn drivers of the likelihood of children running into the road (with "SCHOOL" signs in towns and villages).

We can certainly ensure that there are no surprises in terms of the road infrastructure. We can present drivers with a constant, uniform, and easily understood array of signs and road markings.

We can install "bend warning" and advisory speed signs where the horizontal or vertical alignment on the improved road is still sub-standard. We can show, on the carriageway, whether adequate sight distance is available for overtaking. We can (with legislative support) install speed limits with signs through villages. We can delineate the edges of towns and villages with raised "tables" – perhaps of coloured asphalt. We can provide transverse carriageway markings on the approach to potential hazards. Drivers in general may not have either the experience or awareness to heed all the signs but, in time, they will come to appreciate their value. They will immediately assist the police (or insurance companies) in revealing very clearly any contributory driver error in the investigations after an accident. If at first only a small percentage drivers heed the signs and markings they will eventually influence the majority; accidents will, in time, be reduced.

The Consultant considers that the required signs and road markings should be seen as one of the most cost effective and practically useful results of this improvement scheme. We will design these safety features as an integral part of the whole project.

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Privately Owned Land:

It is assumed that the Ministry will advise the Consultants regarding rates for land acquisition. Land acquisition costs may be a significant element of the project costs.

The most important factor for successful land referencing is the personnel involved! To obtain the correct land ownership information requires many hours of direct contact with land owners (and their neighbours) along the line of the road; The Consultant will use experienced local staff who are able to present a professional but sympathetic image in their liaisons.

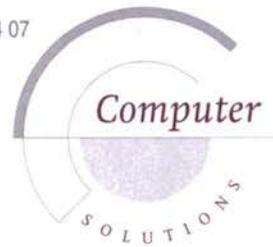
The Consultant will undertake the necessary liaisons with Local Government, the Registration Office of the Real Estate, Land Registry Department and the Urban Department of each District. We will produce the required data containing all the necessary plans and property details, identifying the ownerships, the land and buildings and their type, size and use etc.

The above detailed land referencing work has not been priced in this tender but could be undertaken at additional cost if required.

B.4.3.2.1.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference

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B.4.3.2.2. Task 4.2.2.2 Tender Documents

B.4.3.2.2.1. Method of Approach

The Consultant's integrated computer design software will enable the contract documents to be produced to a high standard. They will be produced in accordance with the FIDIC Conditions of Contract for Works of Civil Engineering Construction (Fourth Ed 1987 with 1992 amendments). Our proposed team members have good experience working within these conditions of contract.

Having completed many major projects, under many different types of contract for a variety of funding organisations around the world The Consultant staff realise the crucial importance of the contract documents. They describe the work required and form the basis of the contract; they must be thorough and accurate; they must contain all the necessary details, clearly and unambiguously expressed; they must give the Tenderers a full knowledge of what is required in terms of the final scheme and the standards to be applied.

The quality of these documents is always directly related to the quality of work, which has preceded them.

The Consultant is confident, as a result of its successful completion of many similar projects, that its contract document preparation will be of the highest quality.

B.4.3.2.2.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference.. We will provide all the necessary tender documents including, component technical specifications, tender drawings, Bills of Quantities and works specifications etc.

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B.4.3.2.3. Task 4.2.2.3: Prequalification of Contractors

B.4.3.2.3.1. Method of work

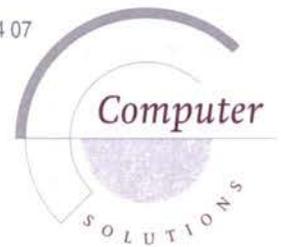
Pre-qualification questionnaires with suitable criteria will be prepared in order to select a short list of Contractors to Tender. The Prequal documents shall be in accordance with EBRD's current standards. A pre-qualification Report will be prepared for EBRD and the Government of Uzbekistan giving recommendations on which Contractors should be asked to Tender.

B.4.3.2.3.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference

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B.4.3.2.4. Task 4.2.2.4: Tender Procedures

B.4.3.2.4.1. Method of work

The Consultants will assist and advise the Govt of Uzbekistan in contract procurement according to the requirements of the ToR.

B.4.3.2.4.2. Outputs

The outputs will be in accordance with the requirements of the Terms of Reference.

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B.4.3.2.5. Task 4.2.2.5: Reporting

The Consultant has very carefully controlled quality standards for the production of Reports. The company has extensive experience of high standard reporting on many major projects, including Feasibility Studies, full detailed designs and contract documents.

The Reports will be produced in accordance with the requirements of the ToR.

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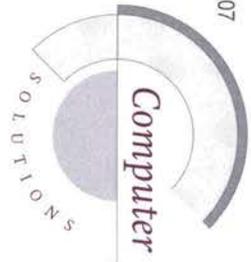
ANNEX B: ORGANISATION AND METHODS

SUMMARY OF INPUT OF STAFF - MODULE A

TENDERER **COMPUTER SOLUTIONS - TRACTEBEL DEVELOPMENT ENGINEERING**

PROJECT **CENTRAL ASIAN BORDER CROSSINGS**
SCR-E/110622/C/SV/WW

Resource Name	Position in Project	Resource Expert Category	Input in Working Days in EU	Input in Working Days in Partner State
VERHEYE L.	Project Director	EU Expert Category I	12	19
BUIS J.	Project Manager	EU Expert Category I	32	112
PELSMAEKER A.	Economic analysis & Traffic Specialist	EU Expert Category I	0	56
FABER S.	Road Design Team Leader	EU Expert Category II	16	0
VAN GINKEL J.	Customs expert - SERVING EU CUSTOMS OFFICER	EU Expert Category I	3	24
VAN HOLLAND C.	Customs expert - SERVING EU CUSTOMS OFFICER	EU Expert Category I	3	13
BEKMAGAMBETOV M.	Local Team Leader	Local Expert Category V		20
KAPLAN E.	Programme Manager	Local Expert Category V		20
BOGDANCHIKOV A.	Database/Modelling Expert	Local Expert Category VI		35
SOBOLEV I.	Database/Modelling Expert	Local Expert Category VI		35
IMANSEITOVA R.	Transport Financial Expert	Local Expert Category VI		30
MELSITOVA T.	Customs & Statistics Expert	Local Expert Category VI		35
SULEIMENOVA S.	Transport Documentation, Freight Forwarding Trainer	Local Expert Category VI		35
IVANOV A.	Legal Expert	Local Expert Category VI		25
BEKMAGAMBETOV G.	Local Expert	Local Expert Category VI		20
ALDABERGENOV B.	Local Expert	Local Expert Category VI		20
TOTAL			66	499



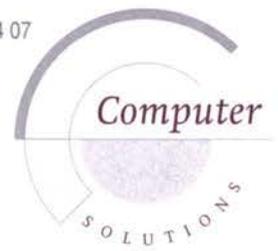
ANNEX B: ORGANISATION AND METHODS

SUMMARY OF INPUT OF STAFF - MODULE B

TENDERER COMPUTER SOLUTIONS - TRACTEBEL DEVELOPMENT ENGINEERING

PROJECT CENTRAL ASIAN BORDER CROSSINGS
SCR-E/110622/C/SV/WW

Resource Name	Position in Project	Resource Expert Category	Input in Working Days in EU	Input in Working Days in Partner State
K.DAVIES	Project Director	EU Expert Category I	2	14
D. BORDER *	Project Manager	EU Expert Category I	4	182
J. PEPIN	Economic analysis & Traffic Specialist	EU Expert Category I	15	28
M. HASOUN	Road Design Team Leader	EU Expert Category I	5	71
T.JENKINS	Bridges/Structures Team Leader	EU Expert Category I	5	32
W.EDWARDS	Contract Specialist	EU Expert Category I	15	14
LOCAL ENGINEER 1	Local Engineer	Local Expert Category V		110
LOCAL ENGINEER 2	Local Engineer	Local Expert Category V		75
LOCAL ENGINEER 3	Local Engineer	Local Expert Category V		88
LOCAL ENGINEER 4	Local Engineer	Local Expert Category V		44
TECHNICIANS	Technicians	Local Expert Category VII		123
TRANSLATORS	Translators	Local Expert Category VI		29
K. KARINI *	Highway Engineer/Local Co-ordinator	EU Expert Category III		118
J FOSKETT	Environmental Specialist	EU Expert Category I	2	28
M. SIMS	Economic analysis & Traffic Specialist	EU Expert Category I	3	17
TOTAL			51	973



PRODUCT DESCRIPTION
Internet Based Track & Trace Application
eTRAIL



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1. Summary

Functional / technical design, software coding and implementation of an Internet based Tracking and Tracing Application for road transport. The web-enabled system facilitates the monitoring of cargo pickups, movements and deliveries along the logistics chain, thus connecting Consignor, Freight Forwarder, Carriers and Depot Operators. Therewith, a close control of the entire supply chain is possible to cut time and costs and to also raise service and quality standards for clients.

The system facilitates a variety of methods of shipment such as direct shipment to the end-customer or shipment via intermediary depots (owned by either the logistics service provider or other private organizations). The application offers several different types of authorized users an insight in the location and status of the (ordered) goods. Hereto, standard Internet Browsers such as MS Explorer and Netscape can be used. Depending on the pre-defined requirements and level of authorization, the system presents different information to the various types of interested users.

Apart from presenting information read only, authorized operators can modify, update and delete data from the system using standard Internet Browsers. Moreover, the system automatically updates tracking and tracing information in the database by means of EDI. Hereto, the application is connected to a variety of in-house computer systems used by the subsequent depot operators and production plant. Frans Maas has a response recording system available for data input by the truck drivers using regular phones or GSM' s. This information is made available via the in-house computer systems to the connected Internet based application. The tracking and tracing of goods can be carried out via a variety of identification codes that the various involved organizations use in-house.

A reporting module is included to be able to regularly obtain an insight in the quality and quantity of the transportation services provided.

The application is designed using Progress, version 9.0 and WebSpeed in combination with HTML and Java coding.



2. Objective

The sole function of the Internet Based Tracking and Tracing Application (eTRAIL) is basically to present up-to-date information on the whereabouts of the goods along the logistics chain. It is clear that because of the availability of this information, a close control of the entire supply chain is possible to cut time and costs and also raise service and quality standards for clients. In concrete this means that a large volume of stock can be moved to an earlier point in the supply chain to cut the amount of capital tied up in stocks.

The ICT infrastructure in place at Frans Maas facilitates the complex planning process of transporting goods all over Europe. The goods are directed from a variety of origins to a diverse range of destinations. With the possibility to access detailed tracking and tracing information on specific shipments, the users of Frans Maas and the main clients (accounts) such as General Electric are able to efficiently monitor and control the shipments under way. This is of direct importance for a centralized planning that covers more logistical nodes and aims for high efficiency and service level. All activities in the supply chain are made transparent with the development of the Web-based application.

The availability of up-to-date data on the one hand, requires a continuous input of information on the other hand. It was a clear objective that the operational costs were kept to a minimum. Whenever possible, EDI is used as a means to automatically insert data and to limit the need for manual input.

All historic data is stored in the tracking and tracing database. This offers the management of Frans Maas and its accounts the possibility to generate detailed reports to periodically safeguard the quality of operations and determine the overall performance and efficiency.

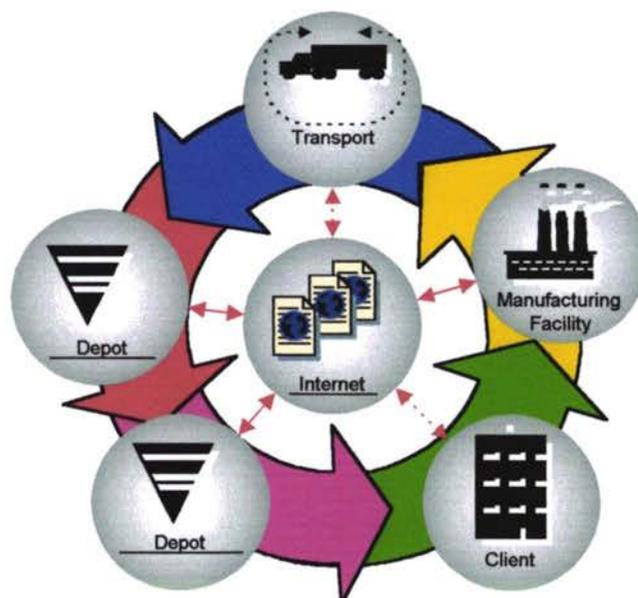
3. Logistics chain

In general terms and in a simplified format, the transport processes of the logistics chain are as displayed below. Since all locations are connected to the same system for both tracking their operations and data communications, it generates a wealth of information that can be accessed for a variety of purposes at any moment of the day or night.

In case no tracking and tracing information can be accessed via the Internet, requests for information will need to be passed on along the logistics chain. In practice this means that inquiries about the status of one specific Consignment/Shipment will be made from Client to Manufacturing Facility to Freight Forwarder to Trucking Company/Depot Operator to Driver and back.

It is obvious that the maximum benefits will only be reached in case the applications connects most (if not all) logistics nodes. The application guarantees the maximum tractability of the goods flows for the manufacturer, clients (retailers/vendors), depot operators, trucking companies, etc. using the latest Internet technology.

The role of the subsequent logistics nodes are described in the following paragraphs.





3.1. Client

The client places an order to the Manufacturing Facility (General Electric Plastics) for the delivery of cargo. The goods are to be delivered to the client with the role of consignee¹. For example, the client of the manufacturer is a retailer (vendor).

3.2. The Manufacturing Facility

The Manufacturing Facility (General Electric Plastics) receives the order from the Client for the delivery of cargo and agrees with the client on the time and date of delivery. Hereto, General Electric Plastics in the role of consignor² checks whether the goods are on stock in the warehouse or can be made ready for transport in time.

The Manufacturing Facility has been simplified, since in actual practice it can cover multiple Production Plants and (neighboring) Stock Centers. A vendor hub is a stock center site close to a client's production site at which Frans Maas temporarily stores products before distributing them to end users.

A shipment³ order is placed at Frans Maas for the pick-up of the goods at the warehouse and the transport to the final place of destination.

¹ Consignee

The party such as mentioned in the transport document by which the goods, cargo or containers are to be received.

² Consignor/shipper

The merchant (person) by whom, in whose name or on whose behalf a contract of carriage of goods has been concluded with a carrier or any party by whom, in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage. Synonym: Consignor, Sender. In NL: Verlader.

³ Consignment/shipment

A separate identifiable number of goods (available to be) transported from one consignor to one consignee via one or more than one modes of transport and specified in one single transport document. Synonym for the USA: Shipment.



3.3. Transport

The Transport organization receives the shipment order and in the role of Forwarder⁴ makes all arrangements for the pick-up, transport and delivery of the goods. This includes the complex planning process and all arrangements necessary to carry out the operations.

Above figure has been simplified, since the Transport organization represents the Logistics Service Provider (Frans Maas), trucking companies (Carriers) and depot operators.

The logistics services are being carried out. The status of the cargo regarding tracking and tracing information is being updated during the course of the transport process. The availability of such information enables a close monitoring and control to ensure that alternative solutions can be provided in time in case operations deviate from the original planning.

Using a voice response system, the truck drivers update the status on-route by using GSM.

3.4. Depot

The optimum planning and control of several supply chains means that goods are directed from a variety of origins to a diverse range of destinations. Hereto, the goods are transported from a Stock Center at the point of origin via multiple intermediate Depots on-route to the Depot at the point of destination.

The Depot operators update the information about the arrival, storage and departure of the trucks using their in-house information systems.

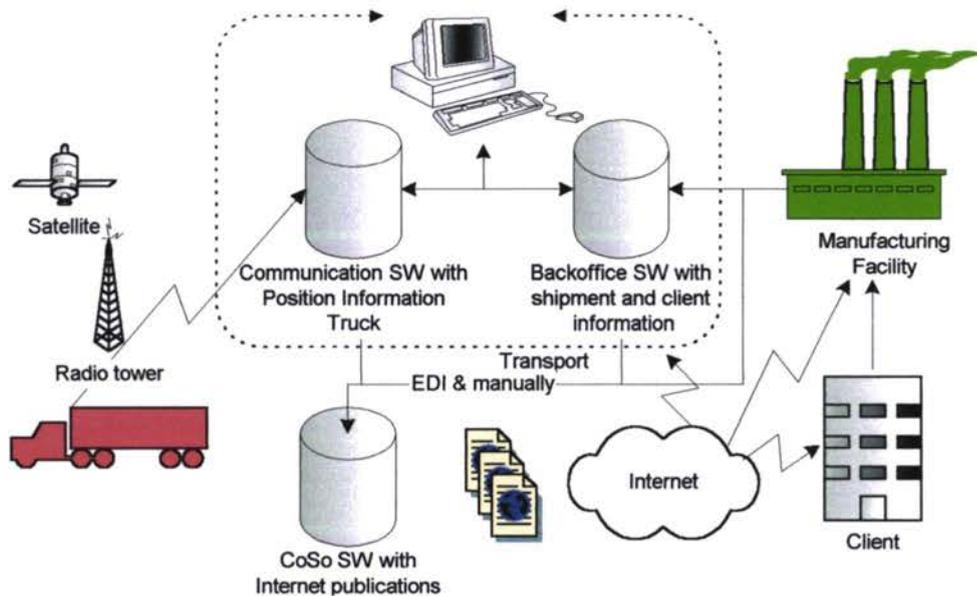
⁴ Forwarder

The party arranging the carriage of goods including connected services and/or associated formalities on behalf of a shipper or consignee. Synonym: Freight Forwarder. In NI: Expediteur.

4. System Architecture

4.1. Information exchange

The information exchange is displayed in below figure.





4.2. Display of information

The sole function of the Internet Based Tracking and Tracing application is basically to present up-to-date information on the whereabouts and the status of the goods along the logistics chain.

The information is presented on screens using standard Internet Browsers. Depending on the username/password used, the proper screen will be presented to the user. The user will input selection criteria to select the desired shipment, where after the search module will search the database and present all matching records.

After completion of this search, the user has to select ONE shipment in case more records are listed. All related information of the shipment will be displayed in detail to the user to enable him to check the status of his goods. This detail information can be transmitted by mail or otherwise.

Several user groups are defined within the system. The information displayed will depend on the authorization level and user group. Frans Maas employees will for example be able to see whether trucks are broken down, in traffic jams or otherwise delayed in order to be able to make alternative arrangements and meet the scheduled time of arrival. General Electric employees will only see (and are only interested in) the ETA.

For more information we refer to Annex A: Screens.



4.3. Input of information

The function of offering reliable tracking and tracing information via the Internet or otherwise seems simple enough. However, for the system to obtain this information is highly complex. At all logistics nodes, information systems are connected to exchange the required data and update eTRAIL. This data exchange can take place by means of EDI or by manual input using standard Internet browsers.

The truck drivers use mobile phones to input data via a voice response system. This information is stored in a database that is being accessed by eTRAIL.

The data is stored in a database and mainly covers tracking and tracing information. All old values are always stored so that historic information on shipments is available. This includes the automatically registered information on made updates. The data in the Track & Trace application will growth significantly and consequently the data is archived at regular intervals. Hereto, a built-in archiving function is available that removes detailed information of the shipment and archives the aggregated data.

The application is designed using Progress RDBMS, version 9.0.



5. Annex A: Screens

Introduction

The Track & Trace application is developed for Internet Explorer 4.0. Other browsers can give different results in layout and navigation. However, Computer Solutions tested the Track & Trace application for additional browsers (Netscape 4.5 and higher).

The screens are optimized for a resolution of 800 X 600. All other resolutions will work but gives a different layout. No graphical examples of the screens are given, because specialized graphical design studios will preferably create them.

Hereafter, the following types of screens are described:

1. login;
2. search;
3. details;
4. update;
5. maintenance.

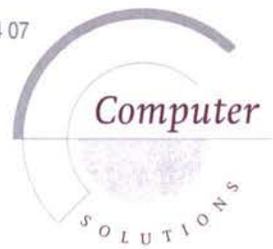
Login screen

The 'login screen' is the first screen of the eTRAIL application. When you connect (read start) the application, the login screen is presented.

The 'Login Screen' uses aggravated delay when a user types in a wrong or unknown combination of username / password. After the 3rd attempt failed, there will be a delay based on the number of unsuccessful attempts * 20 seconds. After every failed attempt, a 'Flashscreens' will be presented with the message "You are not authorized".

In case the login is successful, the application will present the relevant user screens that are based on the given username / password (with the correct business-id). There are three levels of authorization defined: users, business groups and depot-ID.

Every time a user asks for a new page, his identity is sent to the Track & Trace application.



Search screens

The search screens give the user the possibility to search on certain characteristics of shipments. From the result of every search, it is possible to zoom into the details of a shipment. Two types of user groups use the search options:

1. the operators of the system (operational search);
2. the clients (accounts) that are interested in tracking and tracing information (account search).

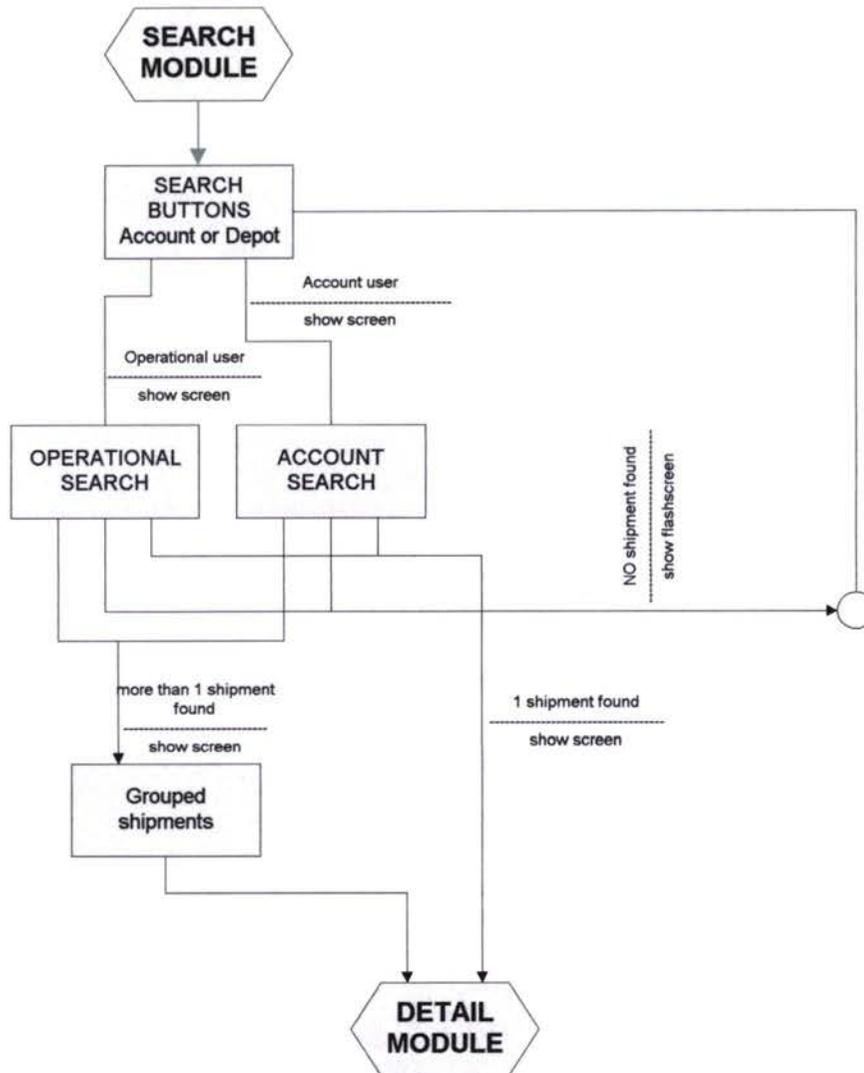
Please refer to the figure on the next page.

To find information about a shipment, the operator has to select the shipment from the database via the 'Operational Search' screen. To search a shipment it is possible to enter the Unique Shipment ID that will result in one shipment. It is also possible to first select a group of shipments and thereafter select the one desired shipment needed.

A user can input selection criteria to find the shipment he needs. After the button "SEARCH" a query containing all selected criteria will be generated and sent to the database. The search will result in:

- No shipment can be found
- One single shipment is found
- More shipments are found

Search queries are restricted to the (current) authorization level of the user.



The search query is based on specific characteristics of a shipment. These characteristics include *sales order number* and *customer-ID*. The number of shipments displayed is limited to a maximum of fifty (50). This is to guarantee a fast web-based application.

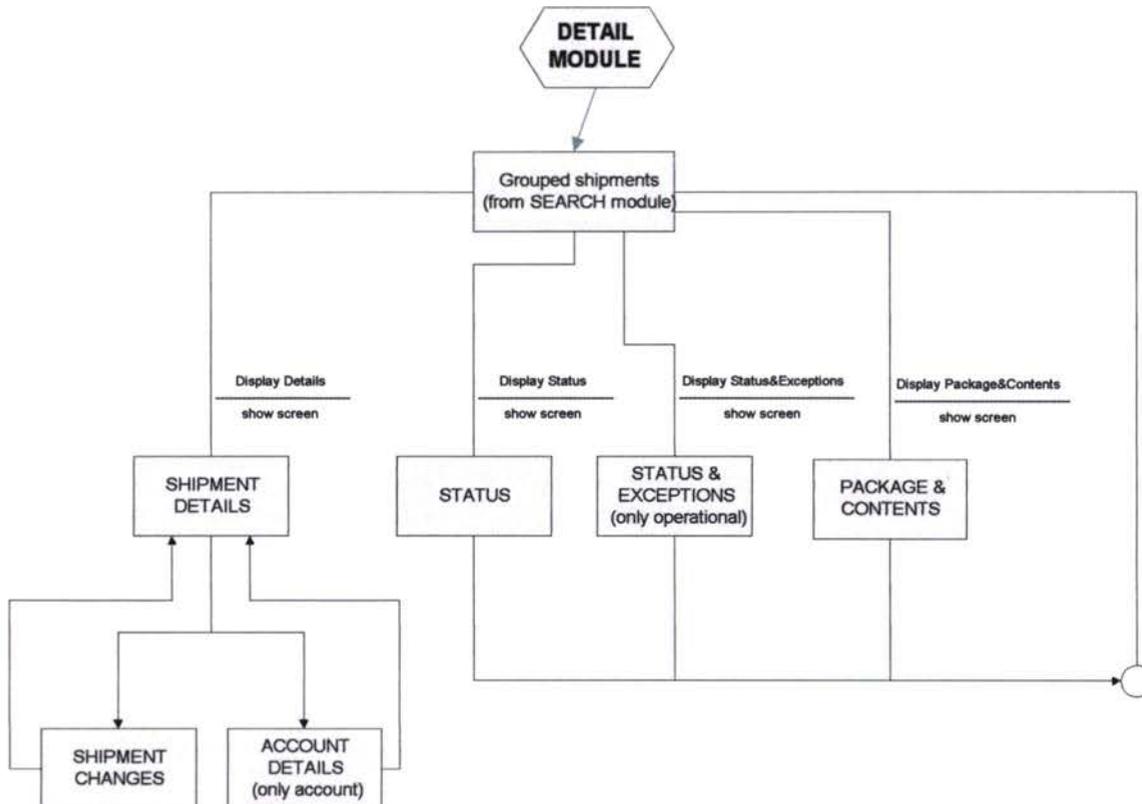
Detail screens

This 'details screens' provide all required details of the shipment, read-only, for tracking and tracing of the cargo items (*sales order number, customer id, invoice number, net weight, etc.*).

Per selected shipment, the following details are displayed on screens:

- Shipment details
- Shipment changes
- Account details per shipment
- Status details
- Status & Exceptions details
- Packages & Contents

The information on packages and the contents is only available to users with the proper authorization. The following figure displays the set-up of the 'details screens'.





Update screens

In principle, two methods of updating data in the tracking and tracing database are available:

1. automatically via the Frans Maas Message Broker using EDI interfaces;
2. manually via the 'Update screens'.

Per update, automatically information on the actual time/date of the status change / shipment change / exception will be registered in the Track & Trace database.

The following data modifications are included:

1. book / cancel status change;
2. enter / cancel exception;
3. update shipment.

Shipment updates include shipments, which arrived at specific depots or were delivered to the customer. All old values are always stored so that no information is lost. The updates of shipments can be grouped, for instance by a manifest. A shipment can have different statuses at the same time. Not all status changes will be visible at business level.

All exceptions can be registered, such as for example missing boxes or damaged goods.

After updating and pressing the 'OK' button, the data will be validated. When all data is correct the changed fields will be updated in the shipment record and the changes will be logged in the ShipChange table. If the status change entered by the user is not according to pre-defined tables a warning message will be presented and the user is asked for a confirmation.



Maintenance screens

Approximately 20 screens for the maintenance of reference tables like, countries, depots, etc. are available. The reference files comply whenever possible with the EDIFACT standards. ISO Codes are used for Country references.

The reference tables available in eTRAIL include:

DESCRIPTION

- Information on Users
- Information on User Groups
- Information on all known depots and hubs
- Types of customers
- List of customers
- All countries (ISO)
- Error messages
- Types of Exception
- Shipment group
- Status and exceptions

Annex C1: Summary List of Key Experts Module A (Computer Solutions - Education)

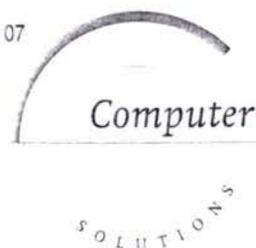
Name of the key expert	Present Employer and Position	Years of Experience	Age	Nationality	Educational Background	Specialist Areas of Knowledge	Experience in the Beneficiary State	Languages and Degree of Fluency (VG, G, W)
L. VERHEYE	Computer Solutions Director	21	47	Belgian	Civil Engineering (3 years) Masters Degree Scientific Computer Applications	Project Direction and management		Dutch - VG English – VG French- VG German - W Romanian - W
J. BUIS	Computer Solutions Project Manager Principal Consultant	15	38	Dutch	Civil Engineer Applied Mathematics	Project Management of multi-disciplinary teams Applied Mathematics Information technology (software, hardware)		Dutch - VG English – VG German - VG
A. PELSMAEKER	Computer Solutions Technical Projectleader	20	45	Dutch	Civil engineer Electronics Masters Degree Bio-Informatics	Project Management Information technology (software, hardware)		Dutch - VG English – VG German - VG
S. FABER JONGMA	Computer Solutions System Engineer	4	28	Dutch	Civil Engineer Applied Mathematics	Information technology Applied Mathematics System Engineering		Dutch - VG English – VG German - VG
J. VAN GINKEL	EDOUcation Manager Dutch Customs Project manager Automation program Dutch Tax training center Part-time teacher	10	35	Dutch	Bachelor degree Customs legislation & procedures	Customs regulations International trade and documents in relation to customs related issues Customs procedures Project management Process redesign		Dutch - VG English – VG German - VG French - G Spanisch G
C. VAN HOLLAND	EDOUcation Partner Dutch Tax training center Senior trainer Projectmanager	10	41	Dutch	Bachelor degree Customs legislation & procedures Master degree Dutch - and international tax-law	Customs regulation Customs auditing International trade and documents in relation to customs related issues Design and integration of customs procedures Project management Process redesign	Kazakhstan 1997	Dutch - VG English – VG German - VG French - G

Annex C1: Summary List of Key Experts Module B (Tractebel Development Engineering - Parkman)

Name of the Key Expert	Present Employer and Position	Years of Experience	Age	Nationality	Educational Background	Specialist Areas of Knowledge	Experience in the Beneficiary State	Languages and Degree of Fluency (VG, G, W)
K.DAVIES	Parkman Divisional Director (E.Europe/C.Asia)	30	55	British	BSc, MSc, MICE, MIHT	Project Direction and management	Uzbekistan and Kyrgyzstan 1997-2000	English – VG Spanish – VG Portugese - VG
D. BORDER	Parkman Project Manager	30	56	British	BSc, CEng, MICE	Project Management of multi-disciplinary teams,. Highway engineering, rehab. & maintenance, feasibility studies, pavement design and contracts		English - VG
J. PEPIN	Tractebel Development Engineering Transport projects director	29	53	Belgian	Civil engineer Master Economics	Economic evaluation of transport projects.		English VG French VG
M. HASOUN	Parkman Team Leader Highways	20	40	British	HND, MICE	Highway, bridge & pavement engineering, rehabilitation.	Uzbekistan 1998 Kazakhstan 1998	English – VG Arabic VG
T.JENKINS	Parkman Team Leader Bridges	32	53	British	BSc, MICE	Structures and bridge engineering		English - VG
W. EDWARDS	Parkman Divisional Director Construction	25	46	British	BSc, FICE, FIHT, FCIA, MICES	Contract document preparation, Arbitration, construction supervision		English - VG
J FOSKETT	Parkman Project Manager	30	51	British	BSc, BA, CEng, MICE	Environmental Appraisal & mitigation measures	Uzbekistan, Tadjikistan and Kyrgyzstan - 1997-1999	English – VG French - W
M. SIMS	Tractebel Development Engineering Transport project manager	29	53	English	BSc Civil Engineering MSc Transport Management	Specialist HDM4, training.	Uzbekistan, Kazakstan and Kyrgyzstan - 1997 1999	English VG Russian W French VG
K.KARINI	Parkman Survey Manager & Local Co-ordinator			Danish		Pavement management, maintenance systems,	1997-2000	English VG Russian G

CURRICULA VITAE

Computer Solutions



STATEMENT OF EXCLUSIVITY

I, the undersigned, LUC VERHEYE, present my candidature within the framework of the following tender:

Project Title: Central Asian Road Border Crossings

Project Number: SCR-E/110622/C/SV/WW

And agree to work exclusively for the consortium:

Computer Solutions / Tractebel / Parkman.

Signed

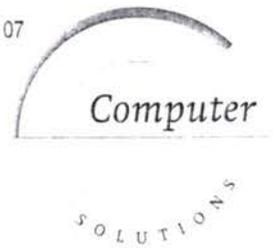
A handwritten signature in black ink, appearing to read "Luc Verheyde", is written over a horizontal line.

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed

A handwritten signature in black ink, appearing to read "Luc Verheyde", is written over a horizontal line.



CERTIFICATE

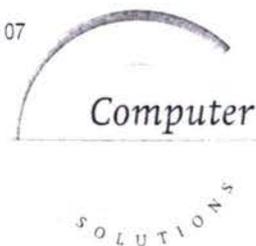
We hereby certify that the professional experience indicated in the Curriculum Vitae of Mr. Luc Verheye is true.

Mr. Luc Verheye works for the company on a full time basis since October 1995. Since 1989 he is involved in Computer Solutions as a shareholder.

Computer Solutions B.V.

L. Verheye
Director.

A handwritten signature in black ink, appearing to read "L. Verheye", is written over a horizontal line. The signature is stylized and cursive.



CURRICULUM VITAE

Proposed position in the project: **PROJECT DIRECTOR**

1. **Family name:** Verheye
2. **First names:** Luc
3. **Date of Birth:** 02/07/1953
4. **Nationality:** Belgian
5. **Civil status:** Married
6. **Education:**

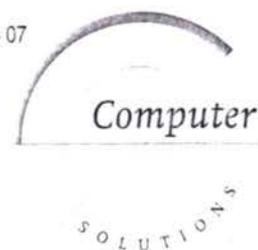
<i>Institution</i>		University of Leuven, Belgium, Civil Engineer Electronics
<i>Date</i>	<i>From (month/year)</i>	1971
	<i>To (month/year)</i>	1979
<i>Degree obtained</i>		Candidate Civil Engineer

<i>Institution</i>		Limburgs Universitair Centrum, Masters Degree Scientific Computer Applications
<i>Date</i>	<i>From (month/year)</i>	1981
	<i>To (month/year)</i>	1982
<i>Degree obtained</i>		Theoretical part

7. **Language skills (marked 1 to 5; 5 = excellent)**

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
English	5	5	5
French	4	4	4
German	3	4	3
Dutch	5	5	5

8. **Membership of professional bodies:** none
9. **Other skills:**
10. **Present position:** Director Computer Solutions
11. **Years with the firm:** 10 years



12. Key qualifications:

Mr. Verheye has an extensive experience and knowledge in relation to automation and project management. In his career spanning over 20 years, he was responsible for the engineering department of several companies specialised in automation. In 1989 he founded Computer Solutions, specialised in the automation in the field of transport and industry.

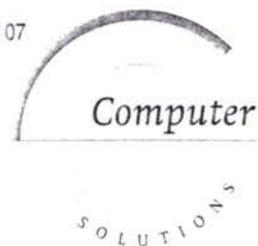
13. Specific Eastern Countries experience:

<i>Country</i>	<i>Date</i>
Georgia	1997 – present
Ukraine	1997 – present
Romania	1994 – present

14. Professional Experience Record:

<i>Date</i>	1989 - present
<i>Location</i>	Breda- The Netherlands
<i>Company</i>	Computer Solutions
<i>Position</i>	Director - owner
<i>Description</i>	<ul style="list-style-type: none"> • Involved in large project for EU, Senter, industry and transport (see reference list). • Involved in the automation of several port terminals in relation to bulk, breakbulk, general cargo, ro/ro and containers (see reference list).

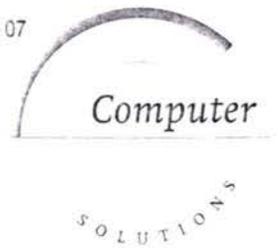
<i>Date</i>	1990 – 1995
<i>Location</i>	The Netherlands
<i>Company</i>	HAS Automation Systems B.V.
<i>Position</i>	Sales Manager - BU Manager
<i>Description</i>	<ul style="list-style-type: none"> • Responsible for the implementation of Computer Aided Dispatching centres (CAD'S) and Mobile Data Communication Systems for the police forces of Amsterdam, Rotterdam, Den Hague, Eindhoven and Tilburg. • Responsible for the realisation and implementation of a Mobile Data Communication System for the Parking Authorities of Amsterdam and The Hague. • Responsible for the realisation and implementation of a SCADA system, in relation to all signalling devices for the ECT terminal in Rotterdam. • Responsible for the realisation of different projects at the police and CRI (Centrale Recherche Informatie) (classified information).



<i>Date</i>	1985 – 1990
<i>Location</i>	Breda - The Netherlands
<i>Company</i>	Molen B.V.
<i>Position</i>	Engineering and R&D manager
<i>Description</i>	<ul style="list-style-type: none"> • Responsible for the complete automation of the terminal of European Bulk Services, Rotterdam - specialised in bulkhandling. • Responsible for the realisation and implementation of the automation of the bulkhandling process of almost all major port terminals in Europe and transshipment companies. • Responsible for hardware and software development

<i>Date</i>	1983 – 1985
<i>Location</i>	Brussels- Belgium
<i>Company</i>	Toledo NV
<i>Position</i>	Engineering manager
<i>Description</i>	<ul style="list-style-type: none"> • Project director for the automation of the BNFW fruit terminal in Zeebrugge. • Project director for the automation of more than 5 complete glassplants in China and England. • Responsible for the implementation of over 200 projects in relation to logistics automation in the industry.

<i>Date</i>	1981-1983
<i>Location</i>	Brussels - Belgium
<i>Company</i>	Sems Benelux
<i>Position</i>	System Engineer
<i>Description</i>	<ul style="list-style-type: none"> • Projectleader for the advanced automation process of a cracking installation at the SIBP plant in Antwerp. Responsible for the development and implementation. • Consultancy and extensive support for the automation of the blast furnaces of ARBED, Luxembourg.



STATEMENT OF EXCLUSIVITY

I, the undersigned, JACK BUIS, present my candidature within the framework of the following tender:

Project Title: Central Asian Road Border Crossings

Project Number: SCR-E/110622/C/SV/WW

And agree to work exclusively for the consortium:

Computer Solutions / Tractebel / Parkman.

Signed

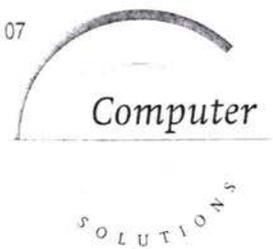
A handwritten signature in black ink, appearing to be "J. Buis", written over a horizontal line.

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed

A handwritten signature in black ink, appearing to be "J. Buis", written over a horizontal line.



CERTIFICATE

We hereby certify that the professional experience indicated in the Curriculum Vitae of Mr. Jack Buis is true.

Mr. Jack Buis works for the company on a full time basis since October 1997.

Computer Solutions B.V.

L. Verheye
Director.



UNIVERSITEIT TWENTE

UNIVERSITEIT VOOR TECHNISCHE EN MAATSCHAPPIJWETENSCHAPPEN

IN DE FACULTEIT DER TOEGEPASTE WISKUNDE HEEFT

Jacobus Buis

GEBOREN *6 okt. 1962* TE *Rhenen*

HET DOCTORAAL EXAMEN IN DE STUDIERICHTING

TOEGEPASTE WISKUNDE

ALS OMSCHREVEN IN ARTIKEL 309 VAN HET ACADEMISCH STATUUT
MET GOED GEVOLG AFGELEGD EN DAARMEE INGEVOLGE HET BEPAALDE
IN ARTIKEL 231 LID 2 VAN DE WET OP HET WETENSCHAPPELIJK ONDERWIJS
HET RECHT VERWORVEN TOT HET VOEREN VAN DE TITEL

INGENIEUR

ENSCHEDA, *2 sept. 1988*

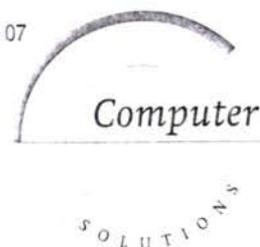
DE GEËXAMINEERDE

Buis

DE EXAMENCOMMISSIE

W. M. M. M. M.

J. H. M.



CURRICULUM VITAE

Proposed position in the project: **PROJECT MANAGER MODULE A**

1. **Family name:** Buis
2. **First names:** Jack
3. **Date of Birth:** October 1962
4. **Nationality:** Dutch
5. **Civil status:** Single
6. **Education:**

<i>Institution</i>	University of Twente, Applied Mathematics	
<i>Date</i>	<i>From (month/year)</i>	1982
	<i>To (month/year)</i>	1988
<i>Degree obtained</i>	Civil engineer Applied Mathematics	

7. **Language skills (marked 1 to 5; 5 = excellent)**

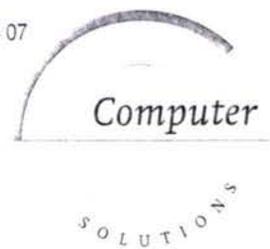
<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
English	5	5	5
Russian	-	1	-
German	4	4	3
Dutch	5	5	5

8. **Membership of professional bodies:** none

9. **Other skills:**

Training courses

- Yourdon Structured Method
- Ambi modules on software design
- Lotus Notes
- Project management
- Rapid Application Development



Specific IT Knowledge

Languages	Hardware	Operating Systems	Networks
Pascal C C++ Simula Unify /Accel Progress/WebSpe edOracle Sybase Ingres Magic Omnis	RS/6000 HP-9000 Intel platform Siemens Motorola-6020/6030	HP-UX AIX Ultrix SCO-Unix SUN-OS Interactive Xenix OS/2 Windows 3.11 Windows 95/98 Windows NT 4.0 MS-DOS VMS UCSD-Psystem	TCP/IP Netbios SNA Ethernet Tokenring IPX NFS/NIS

10. **Present position:** Project Manager / Senior Consultant

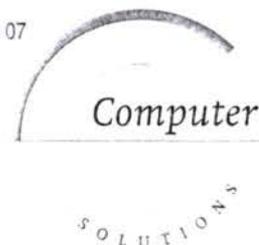
11. **Years with the firm:** 4 years

12. **Key qualifications:**

The most noticeable skill of Mr. Buis is his analytical ability in combination with his excellent advisory qualifications, which makes him capable of solving complex problems on the one hand and rendering advise based upon thorough system analyses on the other hand. Mr. Buis is working as Senior Consultant and Project Manager at Computer Solutions BV. He was responsible for the realisation of a variety of Cargo Handling and Transportation Software Solutions. Project involvement includes automation solutions for the Ports of the Republic of Cabo Verde (Worldbank), the Port of Klaipeda (Lithuania), the Inland Port of Nizhny Novgorod (Russian Federation – EU (Tacis)), the RO/RO terminals of the Port of Poti (Georgia) and the Port of Ilyichevsk (Ukraine –EU (Tacis)).

13. **Specific Eastern Countries experience:**

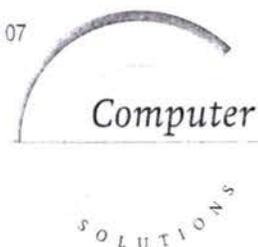
Country	Date
Russian Federation	1999 – present
Georgia	1997 – present
Ukraine	1997 – present
Lithuania	1999 – present
Latvia	2000 - present



14. Professional Experience Record:

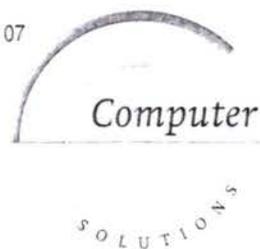
<i>Date</i>	01/10/2000 - present
<i>Location</i>	Latvia
<i>Company</i>	Computer Solutions
<i>Position</i>	Project Manager
<i>Description</i>	<p><u>EDI System for the port of Ventspils, as a follow-up for Integrated Transport Information System (EDITRANS)</u></p> <p>The project aims at improving the infrastructure and operational conditions with the following prime results:</p> <ul style="list-style-type: none"> • Establish a Basic EDI system for the Port of Ventspils and its community. • Supply EDI hard- and software, needed for the Port Community System and interfaces with customs and Latvian Railways. • To arrange in-house technical training of personnel servicing and operating the new systems and equipment delivered. • To introduce and create awareness for the necessity for an EDI system within Latvian Transport Sector. • To assess, analyse and define local working environment requirements, e.g. local information exchange (needs), working procedures, infrastructure communications network etc. • To organise a Short Sea transport platform for bilateral cargo flows by sea. <p>To make statistical information available for connection to the general database of the Ministry of Transport (MoT).</p>

<i>Date</i>	15/01/2000 - ongoing
<i>Location</i>	Lithuania
<i>Company</i>	Computer Solutions
<i>Position</i>	Project Manager
<i>Description</i>	<p><u>EDI in Lithuania</u></p> <p>The project aims at improving the infrastructure and operational conditions with the following prime results:</p> <ul style="list-style-type: none"> • Establish a Basic EDI system for the Port of Klaipeda and its community. • Supply EDI hard- and software, needed for the Basic EDI system and the integration with the ports' database(s) under development. • To arrange in-house technical training of personnel servicing and operating the new systems and equipment delivered. • To introduce and create awareness for the necessity for an EDI system within the Port of Klaipeda community. • To assess, analyse and define local working environment requirements, e.g. local information exchange (needs), working procedures, infrastructure communications network etc. • To prepare a design for an open, sustainable and full-fledged EDI Platform which can be used in different operational and administrative environments in the Port of Klaipeda. • To make operational and managerial information available in the desired format at the appropriate time, which is needed for port efficiency. <p>To make statistical information available for connection to the general database of Transport Sector Statistics Project (TSSP) for monitoring of the transport sector as a whole, by the Ministry of Transport (MoT).</p>



<i>Date</i>	15/08/2000 - 30/10/2000
<i>Location</i>	Russian Federation
<i>Company</i>	Computer Solutions
<i>Position</i>	Project Manager
<i>Description</i>	<p><u>Supply and modification of software for a computerised solution for the inland port of Nizhny Novgorod, Russian Federation.</u></p> <p>The project and computer system objectives are:</p> <ul style="list-style-type: none"> • To implement a system capable of planning, management and tracking of containers, break bulk and general cargo. • To meet the information needs of operational and administrative staff, which are not fully met by the existing manual/computer systems. • To speed up the operational processes and increase the productivity of the staff through the use of computerised facilities. • To improve the quality of information available to the users.

<i>Date</i>	01/11/1999 - 15/08/2000
<i>Location</i>	Europe
<i>Company</i>	Computer Solutions
<i>Position</i>	Project Manager
<i>Description</i>	<p><u>Tracking and Tracing System of Cargo Items in Europe</u></p> <p>The main function of the Internet Based Tracking and Tracing Application is to minimise the efforts required to obtain and distribute information about specific shipments.</p> <p>Furthermore, the system presents up-to-date, accurate information on the whereabouts of the goods along the logistics chain, thus resulting in a close control of the entire supply chain to cut time and costs and to also raise service and quality standards for clients.</p> <p>In concrete, a large volume of stock is moved to an earlier point in the supply chain to cut the amount of capital tied up in stocks.</p>



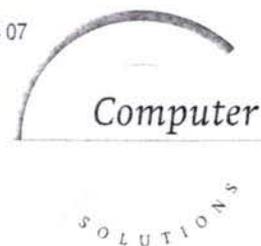
<i>Date</i>	6/01/1997 - 11/08/2000
<i>Location</i>	Georgia, Ukraine
<i>Company</i>	Computer Solutions
<i>Position</i>	Project Manager
<i>Description</i>	<p><u>Establishing A Ferry Cargo Movement Computer System and supply and installation of the necessary computers and communication equipment for the ports of Ilyichevsk (Ukraine) and Poti (Georgia).</u></p> <p>An integrated soft- and hardware package was supplied on a turnkey basis and installed in the appropriate locations in the ports of Ilyichevsk and Poti. The operations staff was instructed for competent use and start-up support was given. The system processes and transfers commercial and transport-related data and documents concerning the ferry service between the two ports involved and between all other participating entities. Additionally, assistance was given to the port of Ilyichevsk with training and technical assistance in the conceptualisation and creation of an independent ferry terminal operating unit (IFTOU).</p> <p>The computer and communication equipment has been supplied and accepted by the recipients, the ports' staff have received adequate training in the contractor's home office (The Netherlands) and the training and technical assistance for the Independent Ferry Terminal Operating Unit have been provided successfully.</p>

<i>Date</i>	21/08/1997 - 21/08/2000
<i>Location</i>	Cape Verde Islands
<i>Company</i>	Computer Solutions
<i>Position</i>	Project Manager
<i>Description</i>	<p><u>Design, delivery and installation of a Port Management Information System in the ports of Porto Grande and Porto Praia (Cape Verde Islands) and establishing a link for consolidation of data.</u></p> <p>An integrated soft- and hardware package was supplied on a turnkey basis and installed in the ports of Porto Grande and Porto Praia. The operations staff was instructed for competent use and start-up support was given.</p> <p>The Port Management Information System (PMIS) is a state of the art information system designed to facilitate the handling of general cargo and containers at port sites.</p> <p>PMIS is a dedicated system that increases port efficiency by:</p> <ul style="list-style-type: none"> • Making (up-to-date) information real-time available in the desired format; • Distributing information to all interested / authorized staff and clients; • Facilitating planning and administration of terminal operations; • Supporting managerial short and long term decision taking; <p>Automation of day to day operations, therewith reducing the workload of staff.</p>

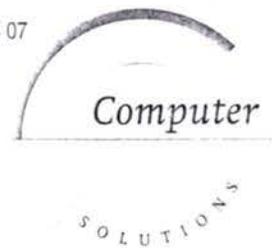
<i>Date</i>	1996 – 1997
<i>Location</i>	The Netherlands
<i>Company</i>	Getronics
<i>Position</i>	Project Leader
<i>Description</i>	<p>For Getronics, the biggest Dutch firm in the software industry with a total of 7000 people employed, Mr. Buis worked as a project leader for IBM (subcontracting). Mr. Buis did work on the following projects:</p> <ul style="list-style-type: none"> • A project for a clearing house on the Dutch Financial Option Market • A project to realise a new release of a software package for all Volkswagen dealers in Holland (as project leader) - Mr. Buis was responsible for a redesign of the network (splitting of the network in a internal (secure) part and a external (insecure) part).

<i>Date</i>	1992 – 1996
<i>Location</i>	The Netherlands
<i>Company</i>	Xirion
<i>Position</i>	Team-leader
<i>Description</i>	<p>Mr. Buis worked as team-leader and consultant at Xirion. Xirion is specialised in the field of management of UNIX systems. As a consultant, he looked into the possibilities of using a RDBMS for a hospital.</p> <p>As a consultant, he did work on the security issues of a Dutch firm specialised in ERP software. He did work out a plan for securing there internal systems and made a description of the capabilities their fire wall should have.</p> <p>As a team leader/consultant he made an information plan for all the legal aid bureau's in Holland (54), including: software and hardware requirements, selecting a supplier for rolling out the whole system, educating the people working with it, setting up a way to maintain these systems and setting up a second line support helpdesk.</p>

<i>Date</i>	1989 – 1992
<i>Location</i>	The Netherlands
<i>Company</i>	Omikron Software Engineering
<i>Position</i>	Senior Programmer / Developer
<i>Description</i>	<p>Omikron Software Engineering is a Dutch firm, active in the field of industrial automation. Mr. Buis worked as senior programmer / developer on several projects under which :</p> <ul style="list-style-type: none"> • Order picking system for a big milk-distributor • Rotomat systems - in co-operation with a German firm, a standard software package was customised for different customers in Holland Belgium and Germany, under which Atea, Teves AG, Bundes Drueckerei • Eyecatcher - a system developed in co-operation with the Open University to deduce the point of focus of a person.



<i>Date</i>	1989
<i>Location</i>	Twente, The Netherlands
<i>Company</i>	University of Twente
<i>Position</i>	Programmer
<i>Description</i>	At the University of Twente, Mr. Buis worked as a programmer. He wrote the software for a research project concerning the method of combining tests from a database of possible questions. There were two major parts to be programmed, the first one was the user interface, which was very important for the acceptance of this method and second, the algorithm which is based on methods from the Operations Research Area.



STATEMENT OF EXCLUSIVITY

I, the undersigned, ALEX PELSMAEKER, present my candidature within the framework of the following tender:

Project Title: Central Asian Road Border Crossings

Project Number: SCR-E/110622/C/SV/WW

And agree to work exclusively for the consortium:

Computer Solutions / Tractebel / Parkman.

Signed

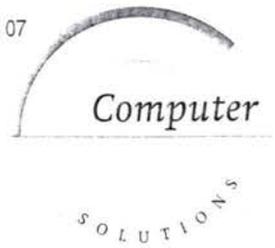
A handwritten signature in black ink, appearing to be "A. Pelsmaeker", written over a horizontal line.

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed

A handwritten signature in black ink, appearing to be "A. Pelsmaeker", written over a horizontal line.



CERTIFICATE

We hereby certify that the professional experience indicated in the Curriculum Vitae of Mr. Alex Pelsmaeker is true.

Mr. Alex Pelsmaeker works for the company on a full time basis since April 1998.

Computer Solutions B.V.

L. Verheye
Director.

A handwritten signature in black ink, appearing to read "L. Verheye", is written over a horizontal line.

TECHNISCHE HOGESCHOOL TWENTE

DE AFDELING DER ELEKTROTECHNIEK VERKLAART DAT

ALEX R.T. PELSMAEKER

GEBOREN 14 DECEMBER 1955 TE 's-GRAVENHAGE

HET BACCALAUREAATSEXAMEN

IN DE STUDIERICHTING DER ELEKTROTECHNIEK,

INGESTELD EN GOEDGEKEURD KRACHTENS HET BEPAALDE

IN ARTIKEL 20 VAN DE WET OP HET WETENSCHAPPELIJK ONDERWIJS,

MET GOED GEVOLG HEEFT AFGELEGD

EN MITSDIEN INGEVOLGE HET BEPAALDE IN ARTIKEL 148 LID 1

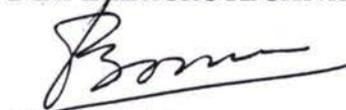
VAN GENOEMDE WET GERECHTIGD IS

TOT HET VOEREN VAN DE TITEL BACCALAUREUS

DE GEËXAMINEERDE



HET BESTUUR VAN DE AFDELING
DER ELEKTROTECHNIEK



VOORZITTER

TECHNISCHE HOGESCHOOL TWENTE

HOGESCHOOL VOOR TECHNISCHE EN MAATSCHAPPIJWETENSCHAPPEN

IN DE AFDELING DER ELEKTROTECHNIEK HEEFT

ALEX R. T. PELSMAEKER

GEBOREN

14 DECEMBER 1955

TE 's-GRAVENHAGE

HET DOCTORAAL EXAMEN IN DE STUDIERICHTING DER

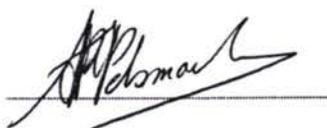
ELEKTROTECHNIEK

ALS OMSCHREVEN IN ARTIKEL 159 VAN HET ACADEMISCH STATUUT
MET GOED GEVOLG AFGELEGD EN DAARMEE INGEVOLGE HET BEPAALDE IN ARTIKEL
147 LID 2 VAN DE WET OP HET WETENSCHAPPELIJK ONDERWIJS HET RECHT
VERWORVEN TOT HET VOEREN VAN DE TITEL

INGENIEUR

ENSCHEDA, 28 juni 1982.

DE GEËXAMINEERDE



A handwritten signature in cursive script, appearing to read 'A. R. T. Pelsmaeker', written over a horizontal line.

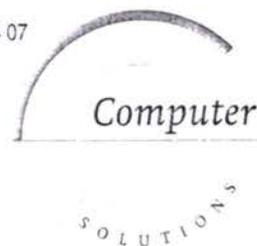
DE EXAMENCOMMISSIE



A handwritten signature in cursive script, appearing to read 'D. B. ...', written over a horizontal line.



A second handwritten signature in cursive script, appearing to read 'H. B. ...', written over a horizontal line.



CURRICULUM VITAE

Proposed position in the project: Technical projectleader - conceptual/technical design

1. **Family name:** ir. A.R.Th. Pelsmaeker
2. **First names:** Alex
3. **Date of Birth:** 14 December 1955
4. **Nationality:** Dutch
5. **Civil status:** Married
6. **Education:**

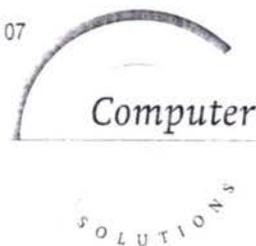
<i>Institution</i>		University of Twente, Bio-Informatics
<i>Date</i>	<i>From (month/year)</i>	September / 1979
	<i>To (month/year)</i>	November/1982
<i>Degree obtained</i>		Master's degree Bio-Informatics

<i>Institution</i>		University of Twente, Measurement Science and Electronic Instrumentation
<i>Date</i>	<i>From (month/year)</i>	September/1974
	<i>To (month/year):</i>	Juni/1979
<i>Degree obtained</i>		Bachelor's degree Measurement Science and Electronic Instrumentation

7. **Language skills (marked 1 to 5; 5 = excellent)**

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
English	5	5	5
German	5	5	5
Dutch	5	5	5

8. **Membership of professional bodies:** none



9. Other skills:

Specific IT Knowledge

Methods	Yourdon Structured Method
Tools	Yourdon Analyst/Designer Toolkit Taylor II simulation tool
Databases	Oracle, Sybase, Unify 2000, MS Access
4 GL	Dataflex, Oracle, Accell/IDS, Accell/SQL, PowerBuilder
Programming languages	Fortran, Pascal, C, Occam, Basic, Forté
Operating Systems	DOS, Windows 95, Windows NT, Unix
Hardware	IBM RS/6000, Siemens RM600, PC
Networks	BITBUS, Waterloo Port, Windows NT, TCP/IP
Languages	Dutch, English, German

10. Present position: Project Manager / Senior Consultant

11. Years with the firm: 3 years

12. Key qualifications:

In 1986, Mr. Pelsmaeker was the first one who received the Entrepreneurs Award of the University of Twente.

He has a Bachelor's degree Measurement Science and Electronic Instrumentation (1979) and a Master's degree Bio-Informatics (1982) at the Technical University of Twente, the Netherlands.

Since 1982, he has written many computer books (over 40 titles) that were published for the consumer market.

He has managed a variety of transport automation projects, as an independent Project Manager during which he was responsible for system analysis, architecture, specifications, design, coding and implementation.

As a System Analyst and Senior Programmer at Computer Solutions B.V he was responsible for design and implementation of the Ferry Terminal Operations System for the ports of Poti (Georgia) and Illiychovsk (Ukraine).

13. Specific Eastern Countries experience:

Country	Date
Georgia	February, April, October 1999
Lithuania	November 2000

14. Professional Experience Record:

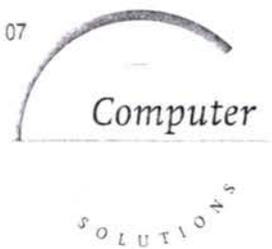
<i>Date</i>	15/01/2000 - ongoing
<i>Location</i>	Lithuania
<i>Company</i>	Computer Solutions
<i>Position</i>	Consultant - designer
<i>Description</i>	<p><u>EDI in Lithuania</u></p> <p>The project aims at improving the infrastructure and operational conditions with the following prime results:</p> <ul style="list-style-type: none"> • Establish a Basic EDI system for the Port of Klaipeda and its community. • Supply EDI hard- and software, needed for the Basic EDI system and the integration with the ports' database(s) under development. • To arrange in-house technical training of personnel servicing and operating the new systems and equipment delivered. • To introduce and create awareness for the necessity for an EDI system within the Port of Klaipeda community. • To assess, analyse and define local working environment requirements, e.g. local information exchange (needs), working procedures, infrastructure communications network etc. • To prepare a design for an open, sustainable and full-fledged EDI Platform which can be used in different operational and administrative environments in the Port of Klaipeda. • To make operational and managerial information available in the desired format at the appropriate time, which is needed for port efficiency. <p>To make statistical information available for connection to the general database of Transport Sector Statistics Project (TSSP) for monitoring of the transport sector as a whole, by the Ministry of Transport (MoT).</p>

<i>Date</i>	6/01/1997 - 11/08/2000
<i>Location</i>	Georgia, Ukraine
<i>Company</i>	Computer Solutions
<i>Position</i>	Technical project leader
<i>Description</i>	<p><u>Establishing A Ferry Cargo Movement Computer System and supply and installation of the necessary computers and communication equipment for the ports of Ilyichevsk (Ukraine) and Poti (Georgia).</u></p> <p>An integrated soft- and hardware package was supplied on a turnkey basis and installed in the appropriate locations in the ports of Ilyichevsk and Poti. The operations staff was instructed for competent use and start-up support was given. The system processes and transfers commercial and transport-related data and documents concerning the ferry service between the two ports involved and between all other participating entities. Additionally, assistance was given to the port of Ilyichevsk with training and technical assistance in the conceptualisation and creation of an independent ferry terminal operating unit (IFTOU).</p> <p>The computer and communication equipment has been supplied and accepted by the recipients, the ports' staff have received adequate training in the contractor's home office (The Netherlands) and the training and technical assistance for the Independent Ferry Terminal Operating Unit have been provided successfully.</p>

<i>Date</i>	1996-1997
<i>Location</i>	Maastricht, The Netherlands
<i>Company</i>	Research Institute for Knowledge Systems (RIKS)
<i>Position</i>	Consultant
<i>Description</i>	Consultant at the Research Institute for Knowledge Systems (RIKS), Maastricht, the Netherlands.

<i>Date</i>	1992-1997
<i>Location</i>	Heerlen, the Netherlands
<i>Company</i>	Open University, Heerlen, the Netherlands
<i>Position</i>	Teacher / examiner
<i>Description</i>	Member of the scientific staff of the Open University, Heerlen, the Netherlands. Teacher and examiner of the courses Operating Systems, Parallel programming and Industrial automation. Supporting and examining students to get their master's degree. Co-author of the course Industrial Automation.

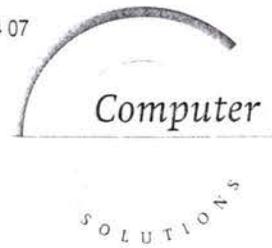
<i>Date</i>	1983-1997
<i>Location</i>	The Netherlands, Germany
<i>Company</i>	Independent
<i>Position</i>	Director Omikron Software Engineering
<i>Description</i>	<p>Managing different industrial automation projects, as an independent projectmanager. Responsible for design and implementation. Important clients were Stork Plastics Machinery (Hengelo, the Netherlands), Melkunie Holland D.C. (Amsterdam, the Netherlands), ITT Automotive GmbH (Frankfurt, Germany), Bundesdruckerei (Berlin, Germany), Open University (Heerlen, the Netherlands), VNU Dagbladengroep B.V. (Nijmegen, the Netherlands), Siemens Atea (Herentals, Belgian) and Nordwest Dental GmbH (Münster, Germany).</p> <ul style="list-style-type: none"> • Bundesdruckerei, Berlin, Germany Automation of a warehouse for storage of passports. Paperless orderpicking. Identification based on OCR-readers. • Computer Solutions B.V., Breda : Design and Implementation of a Ferry Terminal Operations System. • Degalux Holding B.V., Veenendaal Tuning of the company's main computer system. • Dr G.J. van Hoytemastichting, Enschede Development of a Participant Administration System. • European Book Service, De Meern Analysis of the production process and logistics. Design of an improved Orderpicking system. • Hokatex Beelen, Alkmaar Implementation of an integrated control-unit of an industrial laundry. Transport of laundry with cranes, conveyors and elevators. Controlling drying-machines and compression-machines.



<i>Date</i>	1983-1997
<i>Location</i>	The Netherlands, Germany
<i>Company</i>	Independent
<i>Position</i>	Director Omikron Software Engineering
	<ul style="list-style-type: none"> • ITC Meubelfabriek, Terborg Optimisation of stockcontrol. • ITT Automotive GmbH, Frankfurt, Germany Design and Implementation of a Warehouse Management System. Automated storage and retrieval of products with computer-controlled paternosters. Product identification with barcode. • Mailpoint International B.V., Watergang Analysis of the production process and logistics. • MelkUnie Holland D.C., Amsterdam Design and Implementation of a paperless orderpicking system for diary products. The system uses palletisers, stackers, container-loadstations and storage-conveyors. It is completely computer-controlled, no personnel is needed. • Menken Landbouw, Den Haag Design and Implementation of the control-unit of a container-loadstation. • NCD Queensburgh, Zuid Afrika Analysis of warehouse for diary products.. Design of the control algorithms. • Nederlandse Bibliotheekdienst, Leidschendam Analysis of the production process and logistics. Design of an improved Orderpicking system. • Nordwest Dental GmbH, Münster, Germany Design and Implementation of a Warehouse Management System with more then 35.000 locations. • Open University, Heerlen Design and Implementation of an Eye-movement monitoring device. The main issues are image processing and controlling a camera-system. Because of its innovative design, it was twice awarded with state subsidy. • Open University, Heerlen Design of an Intelligent Tutoring System. Knowledge bases and Artificial Intelligence plays an important role. • Picus LHKV, Eindhoven Tuning the production process, using advanced simulation techniques. • Samsom Seminars B.V., Alphen a/d Rijn Development of a Participant Administration System. • Siemens Atea N.V., Herentals, Belgian Design and Implementation of a Warehouse Management System. Paperless orderpicking with handheld terminals and barcode-readers. • Stork Plastics Machinery B.V., Hengelo Development of the Stork Management Information System. This system collects and processes production data from injection moulding machines. It is based on the industrial network BITBUS and build conforming the European standard EUROMAP 15. • Van Engeland Aandrijftechniek, Almelo Design of the control-unit of an mattress wrapping-machine. • VNU Dagbladengroep B.V., Nijmegen Implementation of a communication link between an subscription administration and FERAG printing machines.



<i>Date</i>	1982-1986
<i>Location</i>	The Netherlands, USA, England, Germany and Spain.
<i>Company</i>	Kluwer Technische Boeken, Addison-Wesley Publishers
<i>Position</i>	Author
<i>Description</i>	Written many computer books (over 40 titles) for the consumer market. Published by Kluwer Technische Boeken in the Netherlands and by Addison-Wesley in the USA, England, Germany and Spain.



STATEMENT OF EXCLUSIVITY

I, the undersigned, SASKIA FABER JONGMA, present my candidature within the framework of the following tender:

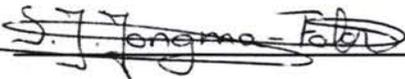
Project Title: Central Asian Road Border Crossings

Project Number: SCR-E/110622/C/SV/WW

And agree to work exclusively for the consortium:

Computer Solutions / Tractebel / Parkman.

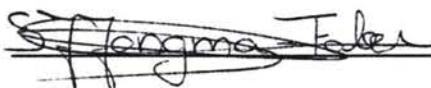
Signed

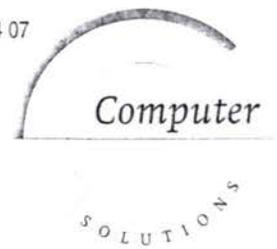


STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed





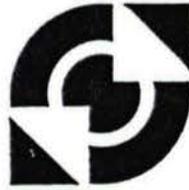
CERTIFICATE

We hereby certify that the professional experience indicated in the Curriculum Vitae of Mrs. Saskia Faber Jongma is true.

Mrs. Saskia Faber Jongma works for the company on a full time basis since August 1998.

Computer Solutions B.V.

L. Verheye
Director.



UNIVERSITEIT TWENTE

UNIVERSITEIT VOOR TECHNISCHE EN MAATSCHAPPIJWETENSCHAPPEN

IN DE FACULTEIT DER TOEGEPASTE WISKUNDE HEEFT

SARA JOHANNA FABER

GEBOREN OP 18 NOVEMBER 1972

TE BERLIKUM

HET AFSLUITEND EXAMEN VERBONDEN AAN DE OPLEIDING

TOEGEPASTE WISKUNDE

AFGELEGD ZOALS BEDOELD IN ARTIKEL 7.10 LID 2 VAN DE WET OP HET HOGER
ONDERWIJS EN WETENSCHAPPELIJK ONDERZOEK EN IS DAARMEE INGEVOLGE HET
BEPAALEN IN ARTIKEL 7.20 LID 1 ONDER a. VAN VOORNOEMDE WET GERECHTIGD
TOT HET VOEREN VAN DE TITEL

INGENIEUR

ENSCHDEDE, 14 FEBRUARI 1997

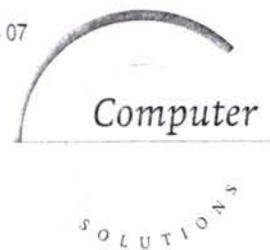
DE GEËXAMINEERDE

S.J. Faber

DE EXAMENCOMMISSIE

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CURRICULUM VITAE

Proposed position in the project: Software specialist

1. **Family name:** Faber Jongma
2. **First names:** Saskia
3. **Date of Birth:** 18 November 1972
4. **Nationality:** Dutch
5. **Civil status:** Married
6. **Education:**

<i>Institution</i>		Technical University Twente, applied mathematics Specialisation: Theoretical System Control and Guidance.
<i>Date</i>	<i>From (month/year)</i>	1991
	<i>To (month/year)</i>	1997
<i>Degree obtained</i>		Civil engineer Applied Mathematics

7. Language skills (marked 1 to 5; 5 = excellent)

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
English	5	5	5
German	4	4	3
Dutch	5	5	5

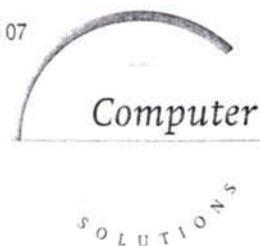
8. Membership of professional bodies: none

9. Other skills:

- Matlab (full understanding)
- Pascal (full understanding)
- 4GL PowerBuilder, version 6.5 (full understanding)
- Sybase RDBMS (full understanding)
- Progress 4GL (full understanding)

Training courses

- Courses on 4GL programming languages (PowerBuilder, Progress)



10. Present position: System engineer

11. Years with the firm: 3 years

11. Key qualifications:

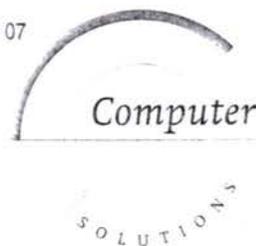
Mrs. Saskia Faber Jongma her present occupation is system engineer at Computer Solutions. She provides IT assistance on a project basis and advises clients regarding application set-up and design.

Her involvement in logistics automation includes the design and software coding of a Ferry Cargo Movement System as part of European Union (TACIS) project for development of the TRACECA corridor.

Saskia Faber was recently lead engineer for the development of a major Web enabled track and trace application for a logistics service provider in Holland.

12. Specific Eastern Countries experience:

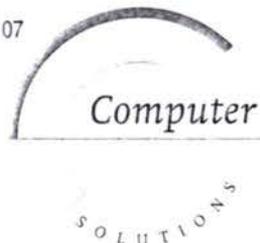
<i>Country</i>	<i>Date</i>
Russian Federation	1999 – date
Georgia	1997 – date
Ukraine	1997 – date



13. Professional Experience Record:

<i>Date</i>	15/08/2000 - 30/10/2000
<i>Location</i>	Russian Federation
<i>Company</i>	Computer Solutions
<i>Position</i>	Lead engineer
<i>Description</i>	<p><u>Supply and modification of software for a computerised solution for the inland port of Nizhny Novgorod, Russian Federation.</u></p> <p>The project and computer system objectives are:</p> <ul style="list-style-type: none"> • To implement a system capable of planning, management and tracking of containers, break bulk and general cargo. • To meet the information needs of operational and administrative staff which are not fully met by the existing manual/computer systems. • To speed up the operational processes and increase the productivity of the staff through the use of computerised facilities. • To improve the quality of information available to the users.

<i>Date</i>	01/11/1999 - 15/08/2000
<i>Location</i>	Europe
<i>Company</i>	Computer Solutions
<i>Position</i>	Lead Engineer
<i>Description</i>	<p><u>Tracking and Tracing System of Cargo Items in Europe</u></p> <p>The main function of the Internet Based Tracking and Tracing Application (IBTTA) is to minimise the efforts required to obtain and distribute information about specific shipments.</p> <p>Furthermore, the system presents up-to-date, accurate information on the whereabouts of the goods along the logistics chain, thus resulting in a close control of the entire supply chain to cut time and costs and to also raise service and quality standards for clients.</p> <p>In concrete, a large volume of stock is moved to an earlier point in the supply chain to cut the amount of capital tied up in stocks.</p>



<i>Date</i>	01/08/1998 - 11/08/2000
<i>Location</i>	Georgia, Ukraine
<i>Company</i>	Computer Solutions
<i>Position</i>	System Engineer
<i>Description</i>	<p><u>Establishing A Ferry Cargo Movement Computer System and supply and installation of the necessary computers and communication equipment for the ports of Ilyichevsk (Ukraine) and Poti (Georgia).</u></p> <p>An integrated soft- and hardware package was supplied on a turnkey basis and installed in the appropriate locations in the ports of Ilyichevsk and Poti. The operations staff was instructed for competent use and start-up support was given.</p> <p>The system processes and transfers commercial and transport-related data and documents concerning the ferry service between the two ports involved and between all other participating entities. Additionally, assistance was given to the port of Ilyichevsk with training and technical assistance in the conceptualisation and creation of an independent ferry terminal operating unit (IFTOU).</p> <p>The computer and communication equipment has been supplied and accepted by the recipients, the ports' staff have received adequate training in the contractor's home office (The Netherlands) and the training and technical assistance for the Independent Ferry Terminal Operating Unit have been provided successfully.</p>

<i>Date</i>	1997 - 1998
<i>Location</i>	The Netherlands
<i>Company</i>	Academic Medical Center, Leiden
<i>Position</i>	Scientific researcher
<i>Description</i>	<p>Projects include:</p> <ul style="list-style-type: none"> • Modeling and generation of pulmonary sounds for the Leiden Anaesthesia Simulator • Design of a remote control with artificial intelligence for the Leiden Anaesthesia Simulator.

<i>Date</i>	1991 - 1997
<i>Location</i>	The Netherlands
<i>Company</i>	Technical University Twente
<i>Position</i>	Trainee
<i>Description</i>	Research activities

CURRICULA VITAE

eDOUcation



eDOUcation

Hessenweg 40
3835 PK Stoutenburg

Tel: 033 4320068
Fax: 033 4320074
E-mail: admin@edoucation.com

WWW.EDOUICATION.COM

Company profile

Name: eDOUcation CV
Seat: Stoutenburg (The Netherlands)

eDOUcation is founded in 1998. Before this time in the Netherlands hardly any specialised organisation existed for the training, guidance/consultancy and information in the field of Customs legislation and related issues on the non-governmental market.

eDOUcation works for Dutch and international companies and foreign governments. The main business of eDOUcation is to design and organise training courses and to develop training materials. These training courses can be built out of our standard products or they can be tailor made. For these training courses eDOUcation can make use of highly qualified specialists/trainers. Most of them are working in the Customs service.

Beside this eDOUcation offers guidance and consultancy for foreign companies or governments in the field of proces (re)design. In this case eDOUcation will conduct an inquiry to the flow of goods and the information needed by both the customer and Customs (based on existing legislation). Thus resulting in specific recommendations to facilitate the processes of both the customer and Customs.

eDOUcation

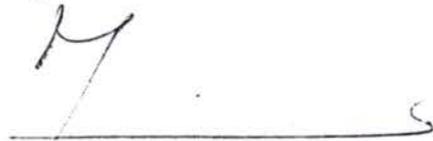
Hessenweg 40
3835 PK Stoutenburg
The Netherlands

Tel: + 31 33 4320068
Fax: + 31 33 4320074
E-mail: admin@edoucation.com
Web: <http://www.edoucation.com>

Statement of availability

I undersigned, Jan van Ginkel, undertake to be able and willing to work for all the period of implementation of the project indicated in the terms of reference, in the event of award of the contract to the tenderer Computer Solutions (with eDOUcation as subcontractor) and Tractebel Development Engineering, in association with Parkman Limited, that has presented me as candidate for the project: Central Asia Border Crossings: Tender number SCR – E/110622/C/SV/WW.

Signature:



Date:

February 13th 2001

eDOUcation

Hessenweg 40
3835 PK Stoutenburg
The Netherlands

Tel: + 31 33 4320068
Fax: + 31 33 4320074
E-mail: admin@edoucation.com
Web: <http://www.edoucation.com>

Statement of exclusivity

I undersigned, Jan van Ginkel, present my candidature within the framework of the following call for tender:

Project title: **Central Asian Border Crossings**

Tender number: **SCR – E/110622/C/SV/WW**

I commit myself to working exclusively for the tenderer Computer Solutions (with eDOUcation as subcontractor) and Tractebel Development Engineering, in association with Parkman Limited.

Signature:



Date:

February 13th 2001

CURRICULUM VITAE

Proposed position in the programme: **SERVING EU CUSTOMS OFFICER - CUSTOMS EXPERT**

- 1. Family name** : Van Ginkel
2. First names : Jan
3. Date of birth : 17/06/1965
4. Nationality : Dutch
5. Civil status : Married

6. Education

	HBO education in Customs legislation and procedures	Project management/ organisational skills/ economics (certificates)/proces redesign
Institution	Training institute Min. Of Finance	Nimo/ISW/University/In-company
Date	1989	1990/1992/1994/2000
Degree	Yes	

7. Language skills

Language	Reading	Writing	Speaking
Dutch	5	5	5
English	5	4	4
Germa	5	4	4
French	3	2	3
Spanish	2	2	3

8. Membership of professional bodies

9. Computer literacy : MSWord, PowerPoint, Excel, Access

10. Present position : Manager of eDOUcation
 Project manager Automation program Dutch Customs
 Part-time teacher Dutch Tax training center
 Chairman of investors club.

11. Years with the firm : Three years.

12. Key qualifications : Customs regulations, International trade and documents in relation to customs related issues, Customs procedures. Project management Process redesign.

13. Specific experience

Country	Date
Teaching Bulgarian Customs officers	1992
Participation in PSO project in Odessa (Ukraine) for the part of trade facilitation	1999

14. Professional experience record

Date (from/to)	<ol style="list-style-type: none"> 1. 1998-1999 2. 1993-1998 3. 1989-1992 4. 1992-1994 5. 1994-1998 6. 1999-2000 7. 2000
Location	<ol style="list-style-type: none"> 1. Stoutenburg 2. Amersfoort/Woerden/Zoetermeer/Utrecht/Lelystad 3. Dordrecht 4. Utrecht 5. Utrecht 6. Apeldoorn 7. Apeldoorn/Rotterdam
Company	<ol style="list-style-type: none"> 1. EDOUcation 2. EVO 3. Dutch Customs 4. Tax training center 5. Center for knowledge and communication (Tax service) 6. Dutch Customs, special projects 7. Dutch Customs, Center for Process and Product design
Position	<ol style="list-style-type: none"> 1. Director 2. Teacher/trainer 3. Specialist Customs legislation 4. Full time teacher 5. Account manager 6. Team manager 7. Project manager
Description	<ol style="list-style-type: none"> 1. Providing training programs and passing knowledge to companies and other services in the field of international trade 2. Trainer/assessor customs regulation and customs related trade facilitation 3. Auditor on regulations and procedures, special advisor to the head of the Customs office 4. Trainer and author for the several levels of Customs officers 5. Designing training projects and managing these projects for higher Dutch Customs officers. 6. Team manager in the automation program of Dutch Customs 7. Project manager in automation program of Dutch Customs. Manager of the project to design a new process on incoming cargo in the Netherlands.

- 15. Others:**
- ♦ Design of Customs procedures for Sokhna port in Egypt (1999 – 2000)
 - ♦ Author of Dutch Customs training material (1998-2001)
 - ♦ Training project in China during 4 weeks (1994)
 - ♦ Training of several groups of Chinese officials in the Netherlands during the years 1992-1999
 - ♦ Co-author of the Dutch national instructional guide for Customs officers in 1992-1996
 - ♦ Member of steering group on the co-operation between The Netherlands and Belgium in the field of education and information.
 - ♦ Part-time teammanager in Dordrecht Customs station in 1992.
- Publications:**
- ♦ Author and co-author of various works in the field of training material both for Customs - employees and Trade;
 - ♦ Works on regulations, procedures, origin, transport and warehousing are published and used in training sessions of eDOUcation;
 - ♦ Co-author of the Dutch national instruction for Customs purposes.

eDOUcation

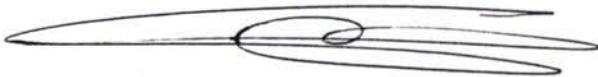
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3835 PK Stoutenburg
The Netherlands

Tel: + 31 33 4320068
Fax: + 31 33 4320074
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Statement of availability

I undersigned, Chris H. van Holland, undertake to be able and willing to work for all the period of implementation of the project indicated in the terms of reference, in the event of award of the contract to the tenderer Computer Solutions (with eDOUcation as subcontractor) and Tractebel Development Engineering, in association with Parkman Limited, that has presented me as candidate for the project: Central Asia Border Crossings: Tender number SCR – E/110622/C/SV/MW.

Signature:



Date: February 13th 2001

eDOUcation

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Statement of exclusivity

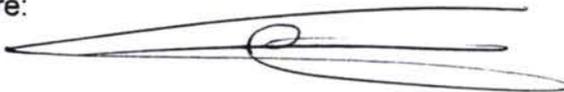
I undersigned, Chris H. van Holland, present my candidature within the framework of the following call for tender:

Project title: **Central Asian Border Crossings**

Tender number: **SCR – E/110622/C/SV/WW**

I commit myself to working exclusively for the tenderer Computer Solutions (with eDOUcation as subcontractor) and Tractebel Development Engineering, in association with Parkman Limited.

Signature:



Date: February 13th 2001

CURRICULUM VITAE

Proposed position in the programme: **SERVING EU CUSTOMS OFFICER - CUSTOMS EXPERT**

- 1. Family name** : Van Holland
- 2. First names** : Christiaan Hendrik
- 3. Date of birth** : 05/06/1959
- 4. Nationality** : Dutch
- 5. Civil status** : Married

6. Education

	Bachelor degree in Customs - Legislation	Master degree on Dutch - and international tax-law
Institution	Dutch Customs and Finance training institute	KUB university
Date	1988	2000
Degree	Yes	Yes

7. Language skills

Language	Reading	Writing	Speaking
Dutch	Mother tongue	Mother tongue	Mother tongue
English	5	4	4
German	4	3	4
French	3	3	3

8. Membership of professional bodies

9. Computer literacy : MSWord, PowerPoint, Excel, Access Lotus 1,2,3 ,Dbase

10. Present position : Partner in eDOUcation
Senior trainer and projectmanager at the central training institute of the Dutch tax administration

11. Years with the firm : EDOUcation two years, Dutch tax administration, over ten years

12. Key qualifications : Customs regulations, Customs auditing, international trade and documents in relation to customs related issues, design and integration of Customs procedures.

13. Specific experience

Country	Date
Kazakhstan (including officials from Uzbekistan and Kyrgyzstan)	October 1997
Id	May 1998 Training of delegations from the aforementioned countries in The Netherlands
Participation in PSO project in Odessa (Ukraine) for the part of trade facilitation	1999
Egypt, design of a new Customs structure	1999/2000
Training of Customs officers from Kyrgyz Customs training centre	October 2000 in The Netherlands

14. Professional experience record

Date (from/to)	1 1998 – 2001 2 1995 – 2001 3 1992 – 1995 4 1988 – 1992
Location	1 Stoutenburg/Dordrecht 2 Utrecht 3 Dordrecht 4 Rotterdam
Company	1 eDOUcation 2 Dutch tax administration 3 id 4 id
Position	1 Senior partner 2 Senior trainer/project manager 3 Customs specialist/auditor 4 Team manager (Customs unit)
Description	1 Trainer/assessor customs regulations and customs related trade facilitation Providing training programmes knowledge to companies and other services in the field of international trade 2 Designing and managing training projects for higher education of Dutch Customs officers, involvement in the development of various training projects and development of learning materials (e.g. Customs auditing, simplified procedures, international organisations, origin and valuation and processes) 3 Auditor on regulations and procedures, special advisor to the head of the Customs office 4 Team manager of a team of Customs officers specialised in transport and warehousing

15. Others

- Publications:
- Author and co-author of various works in the field of training material both for Customs employees and Trade;
 - Works on regulations, procedures, origin, transport and warehousing are published and used in training sessions of eDOUcation;
 - Author of the brochure "Customs valuation and Transfer Pricing".

CURRICULA VITAE

- **Tractebel Development Engineering**
- **Parkman**

STATEMENT OF EXCLUSIVITY

I, the undersigned, KENNETH DAVIES, present my candidature within the framework of the following tender :

Project title: **Central Asia Border Crossings**

Project Number: **SCR – E/110622/C/SV/WW**

And agree to work exclusively for the consortium:

Computer Solutions/Tractebel/Parkman.

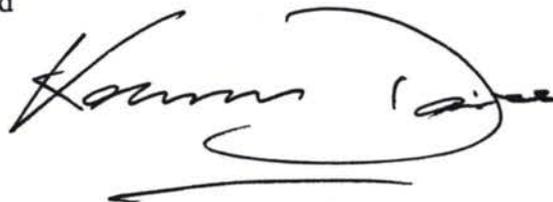
Signed

A handwritten signature in black ink, appearing to read 'Kenneth Davies', with a horizontal line underneath.

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed

A handwritten signature in black ink, appearing to read 'Kenneth Davies', with a horizontal line underneath.



CURRICULUM VITAE

Proposed position in the programme:

1. Family name: DAVIES
2. First names: Kenneth
3. Date of birth: 19.12.1945
4. Nationality: British
5. Civil status: Married

6. Education

Institution:	University of Salford
Date: from (month/year) to (month/year)	1970 1971
Degree(s) or Diploma(s) obtained:	MSc Transportation Engineering and Planning

Institution:	Lanchester Polytechnic, Coventry
Date: from (month/year) to (month/year)	1967 1970
Degree(s) or Diploma(s) obtained:	BSc Civil Engineering

7. Language skills: (Mark 1 to 5 for competence)

Language	Reading	Speaking	Writing
English	5	5	5
Spanish	5	5	5
Portuguese	5	5	5

8. Membership of professional bodies:

Member of the Institution of Civil Engineers
Member of the Institution of Highway Engineers

9. Other skills: (e.g. Computer literacy, etc.)



10. Present position: Regional Director

11. Years within the firm: 27

12. Key qualifications: (Relevant to the programme)

- Experienced in the direction of multi-disciplinary teams
- Commission experience in Uzbekistan and other Central Asian Republics
- Experienced in contracts for major funding organisations

13. Specific Eastern Countries experience:

Country	Date: from (month/year) to (month/year)
Macedonia Pavement Management	11/1996 to present
Slovakia	3/1997 to present
TRACECA	7/1997 to present
Albania	8/96 to 5/97
Hungary	1994 to 1995

14. Professional Experience Record:

Date: from (month/year) to (month/year)	1993 present
Location	Vienna, Austria
Company	Parkman
Position	Regional Director in Eastern Europe
Description	Projects have been won in fields of highway planning, water supply, metro, highway maintenance, pavement studies, feasibility studies

Date: from (month/year) to (month/year)	1985 1993
Location	Spain, Portugal
Company	Parkman
Position	Technical Director
Description	Established new subsidiary company in Madrid, Spain and Lisbon, Portugal to promote technical expertise of Parkman in computer technology applied to studies of highways, transportation, water, structures etc.



Date:	July 1997 - June 1998
Location	Kyrgyzstan, Uzbekistan and Tadjikistan
Company	Parkman Ltd
Position	Project Manager
Description	TRACECA: Roads Maintenance Project, Module E - Central Asia "Silk Routes" (Part of the European Union's TACIS programmes) Pre-Feasibility Studies of three road and three rail projects - including project planning, engineering assessment and cost estimates for the road schemes (corridors 485 - 730 km long). Site visits to corridors.

Date: from (month/year) to (month/year)	1971 1984
Location	UK, Middle East
Company	Parkman
Position	Various
Description	Undertook highway design, contract supervision, appraisal of trunk road schemes etc both at home and overseas, including Libya, Nigeria and others.

15.Others:

Publications:

STATEMENT OF EXCLUSIVITY

I the undersigned, DAVID JOHN BORDER , present my candidature within the framework of the following tender :

Project title: **Central Asia Border Crossings**

Project Number: **SCR – E/110622/C/SV/WW**

And agree to work exclusively for the consortium:

Computer Solutions/Tractebel/Parkman.

Signed

David Border

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed

David Border

CURRICULUM VITAE

- 1 **PROPOSED POSITION:** Project Manager
- 2 **NAME OF STAFF** David John BORDER
- 3 **DATE OF BIRTH:** 7 January 1944
- 4 **NATIONALITY:** British
- 5 **EDUCATIONAL QUALIFICATION:** 1964 – ONC Mechanical Engineering (Civils bias)
1968 – BSc Hons, City University, London, (Civil Engineering)
1970 – MSc, UMIST, Manchester University, (Structural Engineering)
- 6 **MEMBERSHIP OF PROFESSIONAL SOCIETIES:** Fellow of Institution of Highways and Transportation, UK (1989)
Member of Institution of Municipal Engineers, UK (1974)
Chartered Engineer, Engineering Council registration, UK (1971)
Member of the Institution of Civil Engineers, UK (1971)
Associate Member of the Institution of Structural Engineers, UK (1968)
- 7 **EXPERIENCE:** As a team leader in roads sector projects, hr has managed
- network development plan formulation
 - institutional strengthening studies
 - private sector participation development
 - technical feasibility studies,
 - economic viability assessments,
 - traffic control studies,
 - environmental impact assessments,
 - hydrological analyses,
 - stormwater drainage design,
 - pavement design,
 - road route and geometric design,
 - highway structures design,
 - rehabilitation and maintenance,
 - preliminary and final road design studies,
 - progress reporting,
 - international contracts preparation and execution, and final payments, claims and accounts.

All projects included formal and/or informal training components as an inherent part of their international funding concept. Training duties have included on-the-job instruction within direct labour organizations, counterparting for indigenous engineering staff, seminars and formal classroom tuition courses for young technicians.

8 EMPLOYMENT RECORD:

1999 - Present
Zambia

Independent Consultant- Urban Road Support Programme
(covering some 75 urban centres)
Client : Ministry of Local Government & Housing
Financing : World Bank

Carried out pre-proposal field reconnaissance including review of existing pavement design standards, wrote proposal and negotiated consultancy contract for this technical assistance assignment.

1998 - 1999
Uganda

Resident Engineer – Mbarara-Ibanda (62 km) Road
Client : Ministry of Works, Housing & Communications
Financing : World Bank

Prime responsibility as Resident Engineer was the overall management of the on-site re-design and construction supervision of the project and ensuring detailed compliance with the specification by the contractor.

Specific geotechnical problems involved the alignment passing over swampy ground with peaty soil, with black-cotton soil in places, and groundwater problems requiring sub-soil drainage. Quality control was to strict QA procedures. Tests were conducted for full range of testing for earthworks, road pavement and concrete all to ASTM standards.

1997 - 1998

Project Manager– Wacha-Maji Road **Ethiopia**
Client: Ethiopian Roads Authority
Financing: Government of Ethiopia

Project Manager on 345 km of trunk road design study, specific responsibilities included new road pavement design and the economic viability of alternative pavement designs in bound and unbound pavement layers including pavement strengthening by overlay of the existing road structure. Traffic count survey was undertaken as well as an axle-load data collection campaign. All design was to AASHTO standards.

As Team Leader, responsible for the co-ordination of the entire design process. This design study included environmental, hydrological, hydraulic, soils investigation, aerial and topographical survey and traffic survey (volume and loading) components as input to the design and tender document preparation for ICB bidding. The road will be constructed through currently inaccessible mountainous terrain.

1996 - 1997
Tanzania

Project Manager/Road Pavement Advisor – Ipole-Manyoni Road Design
Client : Ministry of Works
Financing : ADB

As Road Pavement Advisor, responsible for the structural design of the new road pavement looking at alternative optimised pavement structure solutions up to bitumen surfacing standards. A comprehensive soils and materials search was conducted and the alternative pavement designs were prioritised in light of material availability and cost.

As Project Manager in charge of a team of experts in the performance of field surveys, soils and materials investigation, geometric design, earthworks and pavement, drainage and bridge design, traffic engineering design, water for construction, engineering plans, construction quantities, cost estimates, bidding and contract documents and reporting. Use of CADD machines for contract document preparation.

1996
Uganda

Institutional Expert–Implementation Mechanisms for 10year Road-Sector Development Programme
Client and financing: Government of Uganda

Main responsibilities included the review and up-dating of the existing institutional report of the 10-Year Road Sector Development Programme (RSDP) study; review the Government of Uganda's policies in respect of road maintenance and operations; analysing the 10-Year RSDP and determining the implementation management and operations requirements. He assessed the existing and anticipated development of the management and operational strength and capacity of the Ministry of Works.

1995 - 1996
India

Resident Engineer/Design Review Assessor–Delhi-Lahore Highway
Client: MOST, Ministry of Surface Transport
Financing: WB

Carried out the pavement design ratification of this high trafficked trunk road comprising dualling an existing single carriageway road in the Punjab. The final design incorporated 800 mm thick road pavement comprising bitumen concrete surfacing and wet mix macadam road base. Overlay and widening sections comprised 50 mm bitumen concrete wearing course and 50 mm bitumen macadam base course.

As Resident Engineer the Works included 160m long prestressed river bridges, numerous medium-span piled bridges and new road junctions with inter-route traffic-management schemes.

1992 - 1994
The Gambia

Resident Engineer – Laminkoto to Passimus Road
Client – Ministry of Works, The Gambia
Financing: IDB, BADEA, OPEC

Responsible for review of design and all contractual administration control of the Contractor on the construction of 60 km of new laterite road including 42 culverts and a 54m long three span composite river bridge at Sami Wharf Town. Contract value sterling £5 million. Assisted with local input for the Basse Bridge topographical survey and soils investigation (EEC project).

1992
Ghana

Highway/Pavement Maintenance Engineer
Urban Transport Policy
Action Programme,
Client: Ministry of Transport, Ghana
Financing: World Bank

Member of a team of five specialists commissioned to formulate a five-year action programme suitably packaged for international donor funding.

As Pavement Maintenance Engineer, was responsible for the selection of pavement design options for the urban roads in six cities in Ghana with particular emphasis on the capital Accra. Many of the roads were heavily trafficked and the rehabilitation design comprised overlaying with bitumen concrete wearing course surfacing with the pavement designed to British TRL (Transport Research Laboratory) Overseas Road Note standards

Recommendations included institutional strengthening, identifying specific areas for further detailed study and determining a prioritised budget proposal for the five years implementation period.

1990 - 1992
Ghana

Project Manager – Urban Road and Drainage Rehabilitation in Accra
Client: Urban Roads Authority
Financing: World Bank

Responsible for the activities of the project team of eight professional expatriate staff and other local professional, technical and clerical staff. Feasibility study and detail engineering design with production of tender documents for the rehabilitation of 260km of urban roads. The study also included the development of a Drainage Master Plan for Accra Metropolitan Area. The study results were packaged into contract lots to cover a 5-year financing implementation.

**1990
Pakistan**

Contracts Engineer/Road Pavement Designer – Indus Left Bank Outfall Drain
Client: WAPDA (Water Authority)
Financing: World Bank

As Road Pavement Designer, was responsible for the road pavement design of the many heavily trafficked access roads influenced by the project. A 'best-value' design was chosen for the various traffic related alternatives.

As Contract Engineer on the construction of a large drainage conduit for the disposal of excess irrigation water to flush effluent from the soil to the sea. Also included provision of water table control by the installation of over 1,400 high capacity and scavenger well systems and tubewell drainage of particularly fine alluvial sediments in the Old Indus Delta. Responsible for programming, preparation, co-ordination and letting of the many road access construction contracts for heavy vehicles in the various component areas of the project. Advised Client on contractual documentation and procedural standardisation.

**1989 - 1990
Oman**

Construction/Contracts Manager – Various Contracts
Client: Various Oman Ministries
Financing: Clients funds

Responsible for the execution of all contracts in the Construction Division of a trading group in Oman. Projects included the detailed engineering design of a road maintenance contract for the Capital Area of Muscat

As Construction Manager, was responsible for substantial resurfacing works and road-widening schemes including the predominately overlay pavement designs for these contractor led alternative pavement proposals and gaining acceptance by Client.

**1985 - 1989
Sierra Leone**

Project Manager – National Bridges and Ferries Rehab.
Client: Ministry of Works
Financing: ODA

He set-up and administered a new nationwide direct labour unit within the Ministry of Works. Responsibilities included budgeting, financial control, planning and programming, ordering and procurement, staff supervision and salaries, maintenance of the unit's staff vehicle and plant fleet and execution of programmes of inspection and rehabilitation works. Redecked over 200 river bridges and rebuilt/recommissioned 18 vehicular pontoon river ferries. Devised computerised bridge inspection report processing system, with consequent automatic prioritised work programme generation.

1984 - 1985
UK

Pavement Engineer – New Roads and Drainage
Construction
Client : British Gas Corporation
Financing : Client

As Pavement Engineer was responsible at the Heavy Pipe Mains Storage Depot in Derby for the design and construction of 24km of concrete carriageway with a piped drainage system under the centre of the carriageway, fed from flat shallow open drainage flush kerbs along the carriageway edges. This arrangement protected the drainage system from damage from heavy vehicular loading. The project included clearing, dismantling, cleaning and filling extensive old subterranean gas works structures. The proper design and construction of appropriate drainage works was of paramount importance in this flat open low-lying storage area which was both in the centre of a built-up area and next to the slow-moving River Derwent.

1981 - 1983
Nigeria

Project Engineer – Bridges inspections, programming and repairs.
National Highway Maintenance Training Project
Client : Federal Ministry of Works
Financing : World Bank IDA

He was responsible for setting-up and managing the highway structures section of this nationwide project. He devised and established a centralised Bridge Maintenance Unit for the country, recruiting and training staff to operate it. The Unit comprised three active sections; a Bridge Registry Office, a Bridge Repair Unit and an emergency Bailey Bridge Erection Unit. He wrote the Code of Practice for bridge inspections and programmed, executed and processed inspection reports and prepared maintenance and repair programmes. His principal training responsibility was the preparation and running of 15 weeks residential courses for inspectors, three times a year. This involved training a local course instructor and preparing a course manual in four volumes. He organised and managed the first replacements of major expansion-joints in elevated highways in Lagos, by direct labour under road possession at weekends. Three bailey-type bridges (Bailey, Acrow, Mabey-Johnson) were erected up-country during his period of management: 110ft., 150ft., & 180ft.

1979 - 1981
United Arab Emirates

Resident Engineer – High Voltage Distribution Networks :
Design check and supervision of inspectors on two contracts.
Client : Ministry of Electricity and Water
Financing : UAE Government

At this time, he was responsible for all civil and buildings components of a 33/11kV underground distribution system in Ajman and a 132/33kV overhead power line system interconnecting five power stations through mountainous terrain at Kalba, Fujairah, Qidfa, Khor Fakkan and Dibba covering some 112km.

1976 - 1979
Kuwait

Resident Engineer – Two simultaneous main contracts on the same site (civils and machinery) for a cable-making factory.

Client : Kuwait Cable Company
Financing : Client

He was responsible for the supervision, phasing and co-ordination of the main civil contractor and the main machinery contractor. The two main contracts combined to give a project value of \$28Million. The project included bituminous access roads for heavy supply/delivery trucks.

1974 - 1976
Qatar, Zambia, Nigeria, UAE

Structures Design Engineer - based in Rome with fieldwork in Qatar, Abu Dhabi, Switzerland
Clients : Government Departments
Funding : Clients and WB

He was responsible for the structural and general design elements of water, commercial and roads projects administered in countries listed left. He made periodic field visits for liaison and supervision. Projects included compost plants, slaughterhouses and building works for electrical power and water distribution schemes. Of note, he design inverted conical and paraboloidal RC water towers by hand calculation; work which was subsequently checked and verified by academic bodies.

1970 - 1974
UK

Senior Bridge Engineer
Nottinghamshire and Ayrshire County Councils
Clients : Central Government and County Councils
Funding : Clients

He gained a wide range of experience in highway bridge design and maintenance, designing over 20 bridges. He developed computer programs for bridge design and sat on the advisory committee at Nottingham University to set out parameters for the development of a unified suite of bridge design computer programs. He executed the annual soils surveys and site investigation programme for the county's forthcoming highway bypasses and new roads designs.

1969- 1970
UK

Sabbatical year to study for master's degree.
University of Manchester Institute of Science and Technology
The Victoria University of Manchester

1965 -1969
UK

Student Engineer and later Site Engineer:
Power Stations and Motorways
Clients : Various
Funding : Clients

Engaged as a site engineer on the M4 motorway construction and two power stations. He was given a six-months training period in the company's structural design office. After graduating, he was engaged as Principal Site Engineer on the construction of a new Iron Foundry in Leeds.

1961 - 1964
UK

Draughtsman/Surveyor : Permanent-Way Track Renewals
British Rail Civil Engineer's Department, Derby, U.K.
Client : British Railways Board

Funding : Client with Government subsidies

He gained proficiency and experience in surveying and draughting work and was engaged on mining subsidence monitoring and remedial works, track renewals and re-alignment, drainage design, estimating and cost control.

PERMANENT EMPLOYMENT WITH THE FIRM:

Yes

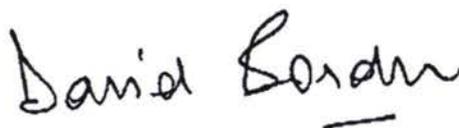
If yes, how many years:

1

If no, what is the employment
Arrangement with the firm?:

CERTIFICATION:

I, the undersigned, certify that to the best of my knowledge and belief, this biodata correctly describes myself, my qualifications and my experience.



Signature of the Candidate

Place

UNITED KINGDOM

Date

1 February 2001

Transportation Division

avenue Ariane 7
B-1200 Brussels (Belgium)
Tel. + 32 2 773 75 11
Fax + 32 2 773 79 90

CERTIFICATE

We hereby certify that the professional experience indicated in the CV of Mr. Jacques Pepin is true.

Jacques Pepin works for our company on a full time basis since the year 1978, except during the period 1986-1994.



I. de Saint Moulin,
Director of Transport Division



Washington, D.C. 20577
CABLE: INTAMBANC

February 2, 1994

TO WHOM IT MAY CONCERN:

This is to certify that Mr. Jacques Pepin, a citizen of Belgium, was on the staff of the Inter-American Development Bank in Washington, D.C., United States of America from October 16, 1986 through January 31, 1994, effective date of his termination by resignation.

Mr. Pepin was an Economist, assigned to the Project Analysis Department of this Institution.

Should you require any further information on Mr. Pepin, please do not hesitate to communicate with us.

Sincerely,

Miriam de Narcho
Miriam de Narcho, Chief
Benefits, Records and Reports Section
Compensation and Benefits Division

TRACTEBEL



Compagnies Réunies Electrobél et Tractionel

Vos réf.

Nos réf.

Tél. direct 02/234

Tél. standard 02/234.41.11

Bruxelles, le

Courrier à adresser:

Rue de la Science 31 - B-1040 Bruxelles

A T T E S T A T I O N

Nous certifions que Monsieur PEPIN Jacques
a été occupé au service de notre société
en qualité d'Ingénieur civil
du 01.05.78 au 15.10.86

Bruxelles, le 15 octobre 1986

TRACTEBEL S.A.

V. PAELMANS
Chef de Bureau Principal

VICTOR HECKMUS
Chef du Service des
Relations du Travail

groupe metra

sobemap

a.g. building
place du champ de mars 5 - boîte 40
1050 bruxelles tél. 02-512.59.90 (20 l.)

adresse télégraph. : sobemametra-bruxelles
telex : 23709 sobema b

PC/ab-217/78 SG
D. P.

Bruxelles, le 7 juin 1978.

ATTESTATION

Je soussigné, Philippe COPPENS, Secrétaire Général de la SOBEMAP certifie que Monsieur Jacques PEPIN domicilié avenue A. Blavie 32 à 1950 KRAAINEM a été employé par notre société du 15 septembre 1974 au 30 avril 1978.



P. COPPENS
Secrétaire Général.

metra

bruxelles francfort genève londres
madrid milan paris téhéran

société belge d'économie et de mathématique appliquées s.a.
c.c.p. 000-0007127-48 - r.c. bruxelles 292.272 - i.v.a. 401.848.135



Beratende Ingenieure
Consulting Engineers
Ingenieurs-Conseils

INFRASTRUKTUR-PROJEKT-GESELLSCHAFT MBH

8 München 82
Truderinger Straße 210
Telefon (0811) 4238 88
Telex 0529991
Kabel Infrap münchen

CERTIFICAT DE TRAVAIL

Nous certifions que M. Jacques PEPIN , ingénieur civil, était collaborateur de notre Bureau d' Etudes pendant la période de Juillet 1971 à Juillet 1972.

Compte tenu de ses qualifications professionnelles, il a notamment participé aux travaux relatif à l'étude de développement général du port de Pointe-à-Pitre (Guadeloupe).

Il a exécuté les tâches lui confiées à notre entière satisfaction. M. PEPIN nous quitte sur son propre désir et libre de tout engagement.

En foi de quoi, nous lui délivrons le présent certificat pour servir et valoir ce que de droit.

Fait à Munich, le 14 Juillet 1972


I. Liscsinszky

Direction du Personnel
IX/A/5

CERTIFICAT

Monsieur Jacques PEPIN
a effectué un stage dans les services de la Commission des Communautés
Européennes du 1.4. au 30.9.1971.

Le programme organisé à l'intention des stagiaires, au cours de
ce séjour, lui a permis d'avoir un aperçu général des activités de
cette Institution, de ses objectifs, de ses travaux et des problèmes
posés par l'intégration européenne.

Le stage a été effectué dans les unités administratives suivantes :

- Direction Générale : Aide au Développement
- Direction : Fonds Européen de Développement
- Division : Opérations financières.

Le Directeur du Personnel



7870/IX/70-F

UNIVERSITÉ CATHOLIQUE DE LOUVAIN

NOUS, PRESIDENT, SECRETAIRE ET MEMBRES DU JURY, CHARGES PAR LA FACULTE DES SCIENCES ECONOMIQUES, SOCIALES ET POLITIQUES DE L'UNIVERSITE CATHOLIQUE DE LOUVAIN DE CONFERER LE GRADE DE LICENCIE EN SCIENCES ECONOMIQUES

Attendu que M Masim PEPIN Jacques, né à Ekerbeek, le 23 mars 1947,
est porteur d'un diplôme de Candidat Ingénieur Civil délivré par l'Université Catholique de Louvain le 12 juillet 1962;
Attendu qu'il a subi le 2 octobre 1970, l'examen sur les matières suivantes : Comptabilité - Economie politique

constituant l'épreuve d'admission à la Licence en Sciences Economiques ;

Attendu qu'il a subi de manière satisfaisante la première épreuve de l'examen de Licencié en Sciences Economiques ayant porté sur les matières suivantes :
Philosophie sociale - Economie pure - Analyses macro-économiques (I) - Analyse économique (I) et (II) - Monnaie et crédit - Histoire économique générale et de Belgique - Structures industrielles - Recherche opérationnelle - Techniques de la recherche opérationnelle et applications

Attendu qu'il a subi avec distinction la deuxième épreuve de cet examen ayant porté sur les matières suivantes : Questions de sciences religieuses - Honneurs économiques généraux et usés - Analyses macro-économiques (II) - Études de commerce international et inter régional - Philosophie de l'économie - Analyse chronologique - Études de développement - Politique économique nationale et internationale - Econométrie (I) et (II) - Problèmes des pays en voie de développement - Séminaire de problèmes européens de politique économique

et qu'il a présenté un mémoire intitulé "Modèle de programmation des investissements portuaires."

Avons conféré et conférons à M Masim PEPIN Jacques le grade de **LICENCIÉ EN SCIENCES ECONOMIQUES**.

En foi de quoi nous lui avons délivré le présent diplôme, attestant en même temps que M Masim PEPIN Jacques
a été réellement élève de l'Université Catholique de Louvain.

Fait à Ottignies-Louvain-la-Neuve, le 24 janvier 1978.

Le Secrétaire,

J. Ueblich

Le Porteur,

[Signature]



Le Recteur,

[Signature]

Le Président et les Professeurs
de l'Institut des Sciences Economiques,

[Signatures]
J. Couvreur
A. Leroy
M. K. 1
J. Couvreur
A. Leroy
M. K. 1
J. Couvreur
A. Leroy
M. K. 1

STATEMENT OF AVAILABILITY

I undersigned, Jasqin Popov, undertake to be able and willing to work for all the period of implementation of the project indicated in the terms of reference, in the event of award of the contract to the tenderer Computer Solutions and Tractebel Development Engineering, in association with Parkman Limited, that has presented me as candidate for the project: Central Asia Border Crossings : Tender number : SCR -E/110622/C/SV/WW

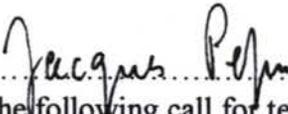
Signature:



Date:

22/01/01

STATEMENT OF EXCLUSIVITY

I undersigned,  , present my candidature within the framework of the following call for tender:

Project title: **Central Asian Border Crossings**

Tender Number: **SCR-E/110622/C/SV/WW**

I commit myself to working exclusively for the tenderer Computer Solutions and Tractebel Development Engineering, in association with Parkman Limited.

Signature: 

Date: 22/01/01

CURRICULUM VITAE

Proposed position in the programme : Transport Economist, Project Manager Module B

1. Family name : PEPIN
2. First names : Jacques
3. Date of birth : March 23, 1947
4. Nationality : Belgian
5. Civil status : Married
6. Education :

<i>Institution :</i>	University of Louvain (Belgium)
<i>Date :</i>	<i>from (month/year) :</i> 10/1965 <i>to (month/year) :</i> 06/1971
<i>Degrees(s) or Diploma(s) obtained :</i>	Civil Engineer

<i>Institution :</i>	University of Louvain (Belgium)
<i>Date :</i>	<i>from (month/year) :</i> 10/1968 <i>to (month/year) :</i> 06/1972
<i>Degrees(s) or Diploma(s) obtained :</i>	Master in Economics

7. Languages skill : (Mark 1 to 5 for competence)

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
French	5	5	5
English	5	5	5
German	3	1	1

8. Membership of professional bodies :

FABI : Royal Federation of Belgian Engineers Associations

9. Other skills :

Has also a very good knowledge of numerous computer models very useful for the preparation of transport project studies: Highway Design and Maintenance Standards model (HDM3), EBM, VOC, Highway Capacity Model, EMME/2, STAN, Modal Choice, Transyt7F, QRS II, HCS, CINCH, CIRCAP, Rural Road, RED, Port Planning, PORTPLAN, Port Simulation techniques, General Purpose Simulation System, SHIPCOST, PORTSIM, port financial models, RAIL, SIMAT (Train Simulation Model), Risk Analysis, etc.

10. Present position :

Project Director
Transportation Division
Tractebel Development Engineering

11. Years with the firm : 15

12. Key qualifications :

As transport economist within an international organisation, adviser in a planning ministry and consultant, has gained a wide practical experience in transport planning and road sector studies. As civil engineer and economist, is particularly well qualified to realise feasibility studies of road projects where economic and technical aspects are closely linked. Has also gained practical experience in road user charges, maintenance plans, transport policy, project financing and institutional aspects.

Having worked for the preparation of several PHARE and ISPA funded projects, has a very good knowledge of E.C. rules and procedures for project preparation and implementation.

Has a sense of tact and diplomacy and the ability to deal with high level government representatives and business people from various countries. Has good ability to work in multi-disciplinary and multi-cultural teams and has demonstrated skill to write and present clear, accurate and concise reports

13. Specific Central and Eastern European and NIS experience :

<i>Country</i>	<i>Date : from (month/year) to (month/year)</i>
<i>Georgia</i>	09/2000 to 02/2001
<i>Bulgaria</i>	09/1995 to 04/1996
<i>Romania</i>	09/1995 to 04/1996
<i>Hungary</i>	09/1995 to 04/1996
<i>Slovak Republic</i>	09/1995 to 04/1996, 02/1999 to 12/2000
<i>Poland</i>	03/1997, 09/2000
<i>Czech Republic</i>	05/1997

14. Professional experience record :

<i>Date:</i>	1994 to now
<i>Location:</i>	Brussels
<i>Company:</i>	Tractebel Development Engineering
<i>Position:</i>	Project Director. Transportation Division
<i>Description:</i>	
<p>MALI - MINISTRY OF TRANSPORT (2000) Feasibility study for the rehabilitation and modernisation of the national road Niono-Tonka (430 km) Realised the economic feasibility study.</p>	
<p>SENEGAL - WORLD BANK (1999) Preparation of the Long Term Transport Programme (Phase II) financed by the World Bank As member of the World Bank team project, was in charge of all aspects related to the implementation of the programme: general implementation procedures, overall project management, links with other financing organisations, financing plan, procurement plans and related procedures, disbursement procedures, performance indicators, programme monitoring.</p>	
<p>SENEGAL - WORLD BANK (1999) Transport sector project Preparation of the economic appraisal of program components.</p>	
<p>TOGO - KUWAIT FUND (1999) Rehabilitation of the Sokodé - Benin border road Economic feasibility study of the project. Was project team leader.</p>	

- SENEGAL – EUROPEAN COMMISSION** (1999)
Construction of a new urban highway (Voie de Dégagement Nord)
 Was in charge of traffic forecasts based on a transport simulation model, project size optimisation, economic evaluation of the investment project, risk analysis based on the Monte Carlo technique.
- SENEGAL – CETUD** (1998)
Privatisation of the bus public transport system
 Analysis of all financial aspects, tariffs settings, financial feasibility, bus operations, calculation of bus operating costs in various conditions, estimate of fleet required for various levels of services.
- CAMBODIA - E.C** (1997)
Transport master plan for the Province of Siem Reap.
 Is project director, and in charge of the planning for the port sub-sector: traffic analysis, feasibility study of new infrastructures and equipment, port tariff system, organisation and institutional aspects.
- INDIA - PRIVATE ENTERPRISE** (1997)
Feasibility and comparative analysis for inland haulage of imported raw coal (railway & road routes)
 Was project director. Was in charge of the comparative analysis between 4 alternative ports capable of unloading some 3,000,000 tons per year: berth capacities, storage possibilities, equipment productivity, stevedoring conditions, port tariffs and costs, ship access, loading equipment on wagons and/or trucks, etc.
- MALI - MINISTRY OF PUBLIC WORKS AND TRANSPORT** (1996)
Rehabilitation of two roads.
 Prepared the economic feasibility of the Sikasso-Koutiala (130 km) and Koutiala-Sienso (115 km) road rehabilitation and maintenance projects.
- POLAND - E.C** (1996)
CZECH REPUBLIK E.C
Seminary on Preparing Projects for International Funding (Phare Multi Country Transport Programme)
 Gave lectures on project preparation and project financing to staff from Ministries of Transport and transport authorities from the public sector (road, rail, port, air and river transport sectors).
- HUNGARY, SLOVAK REPUBLIC, ROMANIA, BULGARIA - C.E.E** (1995-1996)
Regional study for the Danube river Corridor Development Plan.
 As project manager and transport economist, was in charge of transport demand studies (river and 24 ports), investment planning, economic evaluation of 5 river improvement projects and 15 port modernisation projects, preparation of the development strategy. Was also member of the Project Advisory Committee.
- PORTUGAL - CAMINHOS DE FERRO PORTUGUESES** (1995)
Modernisation of the Lisbon-Oporto-Braga railway line
 The project consists in upgrading the line for medium and high speeds trains to serve the EUROCITY and INTERCITY systems. Was project manager for the marketing studies of new services to be provided in the corridor. A multi-modal transport model was used for this study.

Date:	1986 to 1994
Location:	Washington D.C
Company:	Inter-American Development Bank
Position:	Transport Economist
<p><i>Description:</i></p> <p>As a transport economist at the Inter-American Development Bank, identified and prepared numerous programs and projects in the port, road, railway and urban transport sub-sectors.</p> <p>For the road sub-sector, identified, prepared and assessed more than 60 road projects and programs in <i>Chile</i> (pluri-annual road development plan), <i>Argentina</i> (rehabilitation and modernisation of 6 trunk roads in the main export corridors, institutional strengthening, road user charges, security), <i>Bolivia</i> (National Road Development Plan, pluri-annual maintenance plan, analysis of the rail/road competition in the corridors to the Pacific Ocean, urban streets and crossings projects in Santa Cruz, institutional strengthening and financing, preparation and assessment of more than 10 individual road projects), <i>Uruguay</i> (preparation and assessment of 6 trunk road projects in export corridors, bridge repairs, maintenance pilot project, institutional strengthening and financing), <i>Paraguay</i> (preparation and assessment of the rehabilitation of 2 trunk road projects), <i>Brazil</i> (pluri-annual road rehabilitation and maintenance program for the State of Bahia (10 projects), road rehabilitation and maintenance plan for the State of Santa Catarina (5 road projects), rural road projects in the State on Contantin and Minas Gerais, widening to 4 lanes of the 600 km long Fernao Dias highway between Sao Paulo and Belo Horizonte), <i>Ecuador</i> (road rehabilitation and maintenance program, 5 bridge construction projects, institutional strengthening), <i>Surinam</i> (identification of a rural and trunk roads program), <i>Panama</i> (pluri-annual trunk roads rehabilitation and modernisation program), <i>El Salvador</i> (6 road rehabilitation and modernisation projects in export corridors, rehabilitation of more than 10 rural roads, institutional strengthening), <i>Nicaragua</i> (preparation of a rural roads program), <i>Honduras</i> (construction of a new road around San Pedro Sula), <i>Jamaica</i> (rehabilitation and maintenance works of more than 20 rural roads), <i>Haiti</i> (reconstruction of the Mirebalais - Pont Sondé road, national road maintenance program, in Port-au-Prince: rehabilitation of urban streets and crossings, transport development program, traffic engineering projects, institutional strengthening), <i>Dominican Republic</i> (preparation of a national rural roads rehabilitation and maintenance program), <i>Barbados</i> (project to increase the capacity of streets in Bridgetown, institutional strengthening, traffic engineering projects, road signs and security program).</p>	

Date:	1978 to 1986
Location:	Brussels
Company:	Tractebel Engineering
Position:	Head of the Applied Economics Department Transport projects manager
<p><i>Description:</i></p> <p>EUROPE - GOVERNMENT (1986) High speed train (TGV) between Paris-Brussels-Cologne-Amsterdam. Headed the Belgian team in charge of traffic forecasts; prepared and calibrated a transport simulation model specially designed for the project; participated in international co-ordination committees on behalf of the Belgian Transport Ministry.</p> <p>INDONESIA - PRIVATE INVESTOR (1985) New railway line for cement transport Realised a preliminary financial feasibility study of the project; revised the analysis of project alternatives; carried out the economic and the financial pre-feasibility study.</p>	

ZAIRE - WORLD BANK	(1985)
Matadi-Kinshasa road rehabilitation project	
Realised the feasibility study of the project; supervised traffic forecasts; determined the optimal technical alternative; carried out the economic feasibility study (using the HDM model).	
GUINEA - WORLD BANK	(1985)
National Transport Plan.	
Contributed to the setting up of the national transport planning unit; supervised the elaboration of a National Transport Plan including the rail, air and road sub-sectors.	
BELGIUM - TRACTEBEL	(1984 - 1985)
TRANSPLAN computer model	
Directed the development of the computer model aimed at simulating transport of goods and passengers over an inter-urban multi-modal network, including ports, congestion and user charges effects.	
BURUNDI - GOVERNMENT	(1983)
Re-structuration of the bus transport industry in Burundi	
(urban and inter-urban bus transport systems). Realised a survey of the public bus transport sub-sector in order to identify deficiencies and recommend solutions for improving the situation; realised an in-depth public transport market survey; analysed the management, organisation and operations of the public-owned national bus company (Otrabu); revised government policies and regulations for the sub-sector; proposed action plans to improve the efficiency of urban and inter-urban public transports.	
MALAWI - AFRICAN DEVELOPMENT BANK	(1980)
Construction of a new trunk road	
Conducted the feasibility study of the project: realised traffic forecasts using a transport simulation model; carried out a full economic evaluation using agricultural producer surplus and road user savings methods; determined optimal design and timing of the project.	
EL SALVADOR - GOVERNMENT	(1980)
National Railway Development Plan	
Realised a preliminary study of the Plan: realised a survey of the railway sub-sector and devised a multi-modal transport simulation model aimed at preparing a development strategy for the rail sub-sector.	
SENEGAL - E.E.C.	(1979)
Rail transport of groundnut exports	
Contributed to the feasibility study: compared different transport alternatives; calculated unit operating costs of rail transports; contributed to the evaluation of project investment costs; carried out an in-depth analysis of rail operations and port handling.	

<i>Date:</i>	1974 to 1978
<i>Location:</i>	Brussels
<i>Company:</i>	SEMA Group
<i>Position:</i>	Transport planner

Description:

IVORY COAST - IVORY COAST GOVERNMENT **(1974 - 1978)**
National transport planning
As senior adviser at the Ministry of Planning, was in charge of the National Plan for the port, road, maritime and air transport sub-sectors, the assessment and yearly programming of investment projects, and the follow-up of specific programs and projects.

Also functioned as Director of the port of San Pedro, Director of the National Shipping Company, Director of the Institute for Documentation, Research and Maritime Studies and Director of the Laboratory for Construction and Public Works.

For the road sub-sector, devised a National Development Plan, prepared a new road user charges system, new transport policies. Prepared, assessed and planned more than 40 road modernisation and construction projects.

<i>Date:</i>	1972 to 1974
<i>Location:</i>	Brussels
<i>Company:</i>	C.E.I (Belgian contractor)
<i>Position:</i>	Project engineer
<i>Description:</i>	
<p>GABON - PRIVATE (1972 - 1974) Trans-Gabon railway Supervised construction works of several projects. Elaborated preliminary studies for the construction of the Trans-Gabon railway.</p>	

<i>Date:</i>	1972
<i>Location:</i>	München
<i>Company:</i>	Infrastruktur Project Gezellschaft
<i>Position:</i>	Port project engineer/economist
<i>Description:</i>	
<p>GUADELOUPE - E.E.C. (1971 - 1972) Extension of the port of Pointe-à-Pitre Contributed to the feasibility study for the extension and modernisation of the port of Pointe-à-Pitre: prepared traffic forecasts, cost benefit analysis, development plans.</p>	

<i>Date:</i>	1971 to 1972
<i>Location:</i>	Brussels
<i>Company:</i>	E.E.C (European Development Fund)
<i>Position:</i>	Trainee
<i>Description:</i>	
<p>BELGIUM - E.E.C. (1971) Transport projects assessment As a trainee, revised several feasibility studies of port projects in Congo (extension of the port of Brazzaville), Gabon (construction of the new port of Owendo), French Guinea (dredging at the port of Cayenne), Cameroon (extension of the port of Douala) and Togo (extension and modernisation of the port of Lomé).</p>	

15. Others :

STATEMENT OF EXCLUSIVITY

I the undersigned, MO HASOUN , present my candidature within the framework of the following tender :

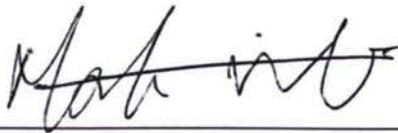
Project title: **Central Asia Border Crossings**

Project Number: **SCR – E/110622/C/SV/WW**

And agree to work exclusively for the consortium:

Computer Solutions/Tractebel/Parkman.

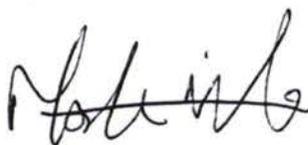
Signed



STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed



Proposed position: Team Leader - Highways
NAME: Mohammed Hassen HASOUN
YEAR OF BIRTH: 1961
PROFESSION: Civil Engineer
POSITION: Senior Engineer
SPECIALISATION: Project Management and Supervision of Highway works



EDUCATIONAL AND PROFESSIONAL STATUS

HND, Civil Engineering, Stockport College of Technology
I.Eng, Incorporated Engineer
AMICE, Associate Member of the Institution of Civil Engineers

SYNOPSIS

Mohammed Hasoun joined Parkman in 1988 and is now as a Senior Engineer in the Infrastructure division. He has specialised in highway engineering, gaining experience both on site and now in the design office. In 1988, he joined the site supervisory post as Assistant Engineer and was recently responsible for supervision of Highway and Environmental schemes as Resident Engineer. He gained overseas experience recently in Central Asia, being responsible for technical assistance and training on a European Union funded project.

EXPERIENCE AND EMPLOYMENT

1991 – Present	Parkman Senior Engineer – Project Management of Highway Works
1990 – 1991	Cumbria County Contracting Works engineer – Project management of highway works – Penrith – Cumbria.
1988 – 1991	Parkman Assistant Resident Engineer – Project management of highway works – M63 Junction 1-3, M63 Junction 3-5 Widening Schemes. St Helens Link Road A523 Macclesfield Relief Road
1987 – 1988	John Kennedy Civil Engineering Site engineer/Agent, Sewer renovation schemes – Manchester
1984 – 1985	Tameside MBC Manchester Trainee Technician, Drainage schemes – Ashton-u-Lyne.

MOHAMMED HASOUN : SELECTION OF PROJECT RESPONSIBILITIES

A500 STOKE "PATHFINDER" PROJECT Jan 2000 - Present

Project Management and Contract Document Preparation.

BISHOP'S STARTFORD RECLAMATION SCHEME

For: BG Plc Properties July 1999 – Dec 1999

Resident Engineer responsible for remediation supervision of old BG site on behalf of British Gas Properties – PL ((Environment)

M57 – A562 LINK ROAD

For: Knowsley MBC 1999 Feb-July

Arbitration and Disputes and Site Supervision for Structural Steel painting remedials

LONGSIGHT RAILWAY DEPOT REGENERATION – MANCHESTER

For: Railtrack – (Stamford Pickard) 1999 Jan/Feb

Subcontractor's Safety Coordinator responsible for all safety aspects on the project and liaison with the principle contractor and client representative (Railtrack). Scheme comprised regeneration of railway depot.

RICHMOND REMEDIATION SCHEME – LONDON

1998 Nov/Dec

Resident Engineer responsible for supervision of old British Gas depot on behalf of British Gas Properties plc (Environment).

TECHNICAL ASSISTANCE TO THE SOUTHERN REPUBLICS AND GEORGIA (TRACECA) – KAZAKISTAN AND UZBEKISTAN

1998 Aug/Oct

Project Manager responsible for technical assistance and training on pavement management system.

STONECROSS PARK – A580 JUNCTION IMPROVEMENTS – MANCHESTER

1998 Jan-Aug

Resident Engineer responsible for construction supervision of highway junctions and industrial development on behalf of Highway Agency and Wigan MBC.

EASTERN SPINE ROAD – TRAFFORD PARK, MANCHESTER

Deputy Resident Engineer/Measurement Engineer responsible for construction supervision and financial management of highway works on behalf of Trafford Park Development Corporation.

M57 – A562 LINK ROAD

For: Knowsley MBC

1994 – 1996

Senior Assistant Engineer responsible for Construction Supervision of highway and bridge works.

M62 – ST HELENS LINK ROAD

For: St Helens MBC

1992 – 1994

Assistant Resident Engineer responsible for construction supervision of highway works to link St Helens town centre to the M62 Junction 7.

MACCLESFIELD RELIEF ROAD

For: Department of Transport

1991 – 1992

Assistant Resident Engineer responsible for construction supervision of highway and structures works on rural link road and urban improvements.

CUMBRIA COUNTY CONTRACTING

For: Cumbria County Council

1990 – 1991

Works Engineer responsible for project management of highway schemes for DLO and private housing developments.

M63 JUNCTION 1-3 AND 3-5 WIDENING SCHEME (M60)

For: Department of Transport

1988 – 1991

Assistant Resident Engineer responsible for Construction Supervision of highway works on a widening scheme.

JOHN KENNEDY CIVIL ENGINEERING – MANCHESTER

1986 – 1988

Site Engineer/Assistant Agent responsible for project management of sewer renovation schemes.

STATEMENT OF EXCLUSIVITY

I, the undersigned, TREVOR JENKINS, present my candidature within the framework of the following tender :

Project title: **Central Asia Border Crossings**

Project Number: **SCR – E/110622/C/SV/WW**

And agree to work exclusively for the consortium:

Computer Solutions/Tractebel/Parkman.

Signed

T. Jenkins.

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed

T. Jenkins.



CURRICULUM VITAE

Proposed position in the programme:

Structures and bridges Team Leader

- 1. **Family name:** JENKINS
- 2. **First names:** Trevor
- 3. **Date of birth:** 1947
- 4. **Nationality:** British
- 5. **Civil status:** Married

6. Education

Institution:	Coventry Polytechnic, England, UK
Date: from - to (month/year)	Sept 1965 - Sept 1968
Degree(s) or Diploma(s) obtained:	Bachelor of Science degree, BSc in Civil Engineering

7. Language skills: (Mark weak, good, excellent for competence)

Language	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent

8. Membership of professional bodies:

Institution of Civil Engineers, UK , MICE

9. Other skills: (e.g. Computer literacy, etc.)

Proficient with all current bridge and structural analysis software

10. Present position: Principal engineer

11. Years within the firm: 17

12. Key qualifications:

- Outstanding experience of detailed bridge design over 20 years
- Experience of bridge checking and condition assessments
- Site supervision experience on major road projects

13. Summary of relevant experience:

Country	Date: from (month/year) to (month/year)
Abu Dhabi	1993
Albania	Jan 1997 - July 1997

14. Professional Experience Record:

Date:	Jan 1997 - July 1997
Location	Albania
Company	Parkman Ltd
Position	Structures and bridges engineer
Description	Assessment of existing structures and design of widening. Design of new multi-span river bridge. Rehabilitation and reconstruction of 80 km of road with two new bypasses. Study element of scheme was substantially completed before the project was temporarily suspended due to civil unrest. EC PHARE programme.



Date:	1995
Location	A550, Wales ,UK
Company	Parkman
Position	Senior bridges engineer
Description	A550 Deeside Park Interchange for the Welsh Office Project engineer responsible for all aspects of the pre-tender design of a Design and Build contract for one of the invited contractors

Date:	1994
Location	London Borough of Bexley, UK
Company	Parkman
Position	Team Leader
Description	Erith / Thamesmead Spine Road Team Leader bridges responsible for the design of a variety of structures on this complex urban highway scheme

Date:	1993
Location	Abu Dhabi
Company	Parkman
Position	Senior Bridges engineer
Description	Abu Dhabi to Dubai Road for the Emirate's Public Works Department Responsible for the design of a number of post-tensioned highway bridges and reinforced concrete underpasses on the 78 kilometre improvement.

15.Others: None

STATEMENT OF EXCLUSIVITY

I, the undersigned, WILLIAM EDWARDS, present my candidature within the framework of the following tender :

Project title: **Central Asia Border Crossings**

Project Number: **SCR – E/110622/C/SV/WW**

And agree to work exclusively for the consortium:

Computer Solutions/Tractebel/Parkman.

Signed

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed

A handwritten signature in black ink, appearing to read 'W. Edwards', written in a cursive style. The signature is positioned below the 'Signed' text and above a horizontal line.



CURRICULUM VITAE

Proposed position in the programme: Contract Specialist

- 1. Family name:** EDWARDS
- 2. First names:** William J
- 3. Date of birth:** 11 May 1954
- 4. Nationality:** British
- 5. Civil status:** Married
- 6. Education:**

<i>Institution:</i>	Leeds University
<i>Date: from (month/year)</i> <i>to (month/year)</i>	1972 1975
<i>Degree(s) or Diploma(s)</i> <i>obtained</i>	BSc (Hons) Civil Engineering

7. Language skills: (Mark 1 to 5 for competence)

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
English	5	5	5

8. Membership of professional bodies:

Fellow of the Institution of Civil Engineers
Fellow of the Institution of Highways and Transportation
Fellow of the Chartered Institute of Arbitrators
Member of the Institution of Civil Engineering Surveyors

9. Other skills: (e.g. Computer literacy, etc.)

Computer literate
ICE Exam in Civil Engineering Law and Contract Procedures (Papers 1 and 3)
Diploma in Arbitration
Qualified civil engineering adjudicator

- 10. Present position:** Divisional Director
- 11. Years within the firm:** 10



12. Key qualifications: (Relevant to the programme)

Management of the design and construction of major highway projects
 From 1990 to 1994 Bill Edwards managed the construction management division which was responsible for the supervision of the construction of highways schemes in the UK.

From 1994 Bill Edwards has headed the Infrastructure Division of the Transportation (North) Business Unit. The infrastructure division is responsible for all aspects of infrastructure projects from initial feasibility study through design to construction. The division prides itself in the diversity of projects in which it is involved. These range from traffic impact studies, airfield refurbishment, project management, rail infrastructure and traditional highway schemes. Bill Edwards has been involved in the design and construction of transportation projects since graduating from Leeds University in 1975. He has worked for all parties in the construction industry, Contractor, Local Government, Central Government and Consulting Engineer.

In 1996 Bill Edwards successfully completed a Diploma in Arbitration. He has subsequently been elected to the ICE list of Arbitrators. He is also a qualified civil engineering adjudicator and is on the I.C.E. and C.I.C. lists. He is also a member of the H.A. and Welsh Office panel of adjudicators.

Bill Edwards has a thorough knowledge of the various standard contract forms used in the construction industry. He has been a part time lecturer since 1990 on the Institution of Civil Engineer's Civil Engineering Law and Contract Procedure course organised by Bolton Institute He is a Member of The Association of Consulting Engineers Legal & Liability Committee

13. Specific Eastern Countries experience:

None

14. Professional Experience Record:

<i>Date: from (month/year)</i>	1990
<i>to: (month/year)</i>	2001
<i>Location</i>	UK
<i>Company</i>	Parkman Ltd
<i>Position</i>	Divisional Director
<i>Description</i>	<p>Knowsley Rail Freight Terminal Client : Knowsley MBC Engineer to ICE 6th Edition contract to construction of a £3.0m Rail Freight Terminal in Knowsley. Work involves laying over 3 km of rail track and connection to Liverpool-Manchester mainline.</p> <p>M25 Junction 6 Eastbound Safety Scheme Client : Highways Agency Project Director & Employers Agent on £3.0m design and build improvement of junction on M25 in Surrey. Contract awarded in February 2000.</p> <p>A500 Stoke Pathfinder Project Client : Highways Agency Project Manager & Employers Agent on £22.5 m scheme to grade separate two junctions on A500. Design & build contract with early involvement of contractor before publication of orders. Tender</p>



invitation May 2000.

A565 Derby Road Improvement

Client : Highways Agency

Engineer to the contract to improve trunk road in Liverpool to allow development of Liverpool Docks. Tender value £500,000.

Town Bridge Refurbishment Northwich

Client: British Waterways

Engineer to the contract to refurbishment of 100 year old swing bridge over the Weaver Navigation.

Tender value £1.2million.

A580 Stone Cross

Client: Highways Agency

Engineer to the contract to provide highway and junction improvement to allow for future industrial development. Tender value £700,000

A487 Port Dinorwic Bypass

Client : Welsh Office

Construction director for rural bypass on the North Wales Peninsular. Major rock cuttings constructed using ripping techniques. Tender Value £8 million.

M57 - A562 Link Road

Client : Knowsley M B C

Construction director for major dual carriageway link road through open country crossing railway and rivers. Three level interchange carrying the new road over the M62 motorway. Significant treatment of abandoned mine workings. Tender Value £24 million.

M25 Improvement Junction 7 - 8

Client : Highways Agency

Construction director for fast track motorway widening of M25 from 3 to 4 lanes. Widening carried in existing land take by use of retaining structures. Tender Value £46 million.

A2016 Erith - Thamesmead Spine Road

Client : Bexley London Borough

Construction director for 2 km of dual carriageway in urban area with removal of contaminated material. Tender Value £15 million

M63 Improvement Junction 6-9

Client: Department of Transport (North West Region)

Project Manager for the feasibility study and preliminary design of widening the existing 2/3 lane motorway to 3/4 lane motorway. The scheme is 7km in length with a current estimated cost of £65 million.



<i>Date: from (month/year) to: (month/year)</i>	1987 1990
<i>Location</i>	UK
<i>Company</i>	Department of Transport, Manchester
<i>Position</i>	Project Engineer
<i>Description</i>	<p>Project Engineer responsible for the construction of:-</p> <p>M63 Improvement Junction 1-3 Online motorway widening from two to three lanes including refurbishment of existing viaduct across Manchester Ship Canal</p> <p>M63 Improvement Junction 3-5 Online motorway widening from two to three lanes involving significant bridge strengthening. Scheme involved the demolition of over 20 properties.</p> <p>M63 Improvement Junction 5-7 Online motorway improvement involving the construction of new junction over existing live motorway.</p> <p>M62 Widening Junction 21-22 Widening of existing motorway (the highest section in England) through the Pennines. Major rock cuttings and remedial works including rock anchors. Refurbishment of 800m Viaduct.</p> <p>A500 Nantwich Bypass Rural bypass with structures over rail and river. Significant liaison with adjoining land owners.</p> <p>Project Engineer responsible for contract preparation of:-</p> <p>A590 Egremont Bypass Cumbria Urban relief road using abandoned railway line as route through town centre.</p> <p>A590 Hensingham Bypass Rural bypass with rock cuttings</p> <p>Acted as Employers Representative on the Nantwich Bypass which was one of the Department's trial contracts based on F.I.D.I.C. conditions of contract.</p> <p>Acted as the Department's point of contact for all surfacing matters and Specification queries.</p>



<i>Date: from (month/year)</i>	1984
<i>to: (month/year)</i>	1987
<i>Location</i>	UK
<i>Company</i>	County of Cleveland
<i>Position</i>	Engineer
<i>Description</i>	<p>A19 Mandale Interchange Reconstruction 1 Resident Engineer for junction improvement and major maintenance constructed under live traffic conditions.</p> <p>A66 Middlesborough Bypass Senior measurement engineer for major reinforced concrete viaduct through centre of the town with corresponding demolition and service diversions.</p>

<i>Date: from (month/year)</i>	1975
<i>to: (month/year)</i>	1984
<i>Location</i>	UK
<i>Company</i>	Dowsett Engineering Construction Ltd
<i>Position</i>	Sub Agent
<i>Description</i>	<p>A590 Levens Bridge Diversion, Cumbria Rural dual carriageway bypass through rock which was blasted</p> <p>A19 Billingham Diversion Dual carriageway with significant structural content including 1.5 km viaduct.</p>

15. Others:

Publications:

STATEMENT OF EXCLUSIVITY

I, the undersigned, KIMO KARINI, present my candidature within the framework of the following tender :

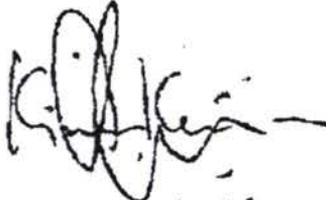
Project title: Central Asia Border Crossings

Project Number: SCR - E/110622/C/SV/WW

And agree to work exclusively for the consortium:

Computer Solutions/Tractebel/Parkman.

Signed



02.02.2001

STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed



02.02.2001

CURRICULUM VITAE – KIMO KARINI

FAMILY NAME Karini
FIRST NAME Kimo
DATE OF BIRTH 1956
NATIONALITY Danish
CIVIL STATUS Not married, one son

EDUCATION

Institution Technical University of Denmark
 From – to 1991 – 1995
 Degree/Diploma obtained Master of Science, MSc., Civil Engineer, Transportation Engineering

Institution Industrial Technical School, Ballerup, Denmark
 From - to 1989-1990
 Degree/Diploma obtained Diploma in Business and Computer Science purpose made for engineers. International Economy and Management Development. Courses in Export Finance, Export Marketing, Total Quality Management, Project Planning, Logical Framework Approach, and Business Process Re-engineering.

Institution Technical University of Baghdad
 From – to 1974 – 1978
 Degree/Diploma obtained Bachelor of Science, BSc. Construction Management and Economics

LANGUAGES

(1= basic 5 = Excellent)

	<u>Reading</u>	<u>Speaking</u>	<u>Writing</u>
English	5	5	5
Danish	5	5	5
Arabic	5	5	5
Russian	4	5	4
Turkish, Azeri	3	4	3
Uzbek, Turkmen	3	3	2
Kazak, Kyrgyz	2	3	1
Tadjik (Farsi)	2	3	3
Italian	2	2	2
Serbo-Croat	2	2	2
Kurdish	Mother tongue		

MEMBERSHIPS

Title of EUR ING;
 Member of the Danish Society of Chemical, Civil, Electrical and Mechanical Engineers (IDA);
 Member of NIS Society of Civil Engineers

OTHER SKILLS

Computer literate using Microsoft Office and Project, AutoCAD, GIS and different Road and Bridge Rehabilitation and Economic Appraisal soft kits. Logical Framework Approach for task definition, implementation and evaluation.

PRESENT POSITION

Technical Manager, Project Manager, Team Coach

YEARS WITH THE FIRM

7 Years, relevant experience 15 years

Kimo Karini

KEY QUALIFICATIONS

Mr. Kimo Karini is an experienced and a versatile project and technical manager with 15 years experience in the field of multi-disciplined Engineering Projects. He has worked on technical assistance projects in Europe, Eastern Europe, Central Asia and Mongolia for national governments and the main multilateral donor Agencies such as the TACIS, IBRD, ADB, UNDP/UNOPS.

He has participated both as team member and team leader in formulation of development programs, proposal writing, project set-up and & size-up, teambuilding, efficient team management and proficient in diplomatic handling of co-operation with local counterparts to insure the smooth transfer of knowledge.

His experience and knowledge includes supervising field measurements, training & application development for the project beneficiaries, human resource management, and financial accountability. He has an intimate knowledge of different Transport Management System's, its implementations and sustainability in the transition and developing countries.

His overseas experiences include following countries:

Armenia, Azerbaijan, Brazil, Canada, Denmark, England, Estonia, Finland, Iraq, Latvia, Germany, Georgia, Macedonian, Mongolia, Norway, Kazakhstan, Kyrgyzstan, Uzbekistan, Yugoslavia, Turkmenistan, Tajikistan, Romania and Russia.

His language skills are unsurpassed, as he speaks 13 mainly from Europe and Central Asian. Furthermore, Mr. Karini has been assigned to the different EU-TACIS projects and gained a good knowledge's with in the field of infrastructure, Marketing, social, and political developments in the CIS-countries.

Specific experience in the beneficiary countries

PE = Project Engineer; PM = Project Manager; T = Team Leader; C = Consultant; S = Supervisor

Country	Project	Position	Years	Months
Armenia	• Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305	PE	1996	2
	• TRACECA Road Maintenance Project – TELREG 9601	PM	97-99	5
Azerbaijan	• Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305	PE	1996	2
	• TRACECA Road Maintenance Project – TELREG 9601	PM	1997	3
Georgia	• Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305	PE	1996	2
	• TRACECA Road Maintenance Project – TELREG 9601	PM	1997	3
Turkmenistan	• Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305	PE	96-97	3
	• TRACECA Road Maintenance Project – TELREG 9601	PM	1998	1
Uzbekistan	• Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305	PE	1996	3
	• TRACECA Road Maintenance Project – TELREG 9601	TL	97-2000	11

Country	Project	Position	Years	Months
Tajikistan	<ul style="list-style-type: none"> Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305 TRACECA Road Maintenance Project – TELREG 9601 	PE	1996	1
		TL	1997	2
Kyrgyzstan	<ul style="list-style-type: none"> Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305 TRACECA Road Maintenance Project – TELREG 9601 	PE	PE	2
		PM	TL	6
Kazakhstan	<ul style="list-style-type: none"> Implementation of Pavement and Bridge Management Systems – TRACECA TELREG 9305 TRACECA Road Maintenance Project – TELREG 9601 Silk Road Consultant- Adviser to KAZDORNII and KAZAVTUDOR – Almaty Market Researches on SME and Business Communication Centre's UNDP\UNOPS- Remote Village Development 	PE	1996	3
		TL	97-00	12
		C	2000	On-going
		C	2000	On-going
		S	2000	On-going
Mongolia	<ul style="list-style-type: none"> TRACECA Road Maintenance Project – TELREG 9601 	PM	97-98	2
Macedonian	<ul style="list-style-type: none"> Institutional set up and Introduction of Pavement and Bridge Management Systems 	PE	97	2

PROFESSIONAL EXPERIENCE RECORD

2000- ongoing

From – to 2000- October
Location Kazakhstan
Company UNDP\UNOPS - KAZ 1242- Remote Village Development
Position Project Supervisor
Description Supervise and monitor the work of the local drilling contractor and the ongoing preparation activities at project sites in west Kazakhstan.

From – to 2000- September
Location Kazakhstan
Company Committee for Road and Road Transport, CRRT and Road Design Institute, KAZDORNII
Position Team Leader
Description Proposal writing, Team member to prepare and submit application for, EU-TACIS-BISTRO Programme "Training, Calibration and Adaptation of Road Testing Equipments to Kazakhstan's Local Standards ", Head of Delegation of the European Commission in Kazakhstan".

From – to 2000- May
Location Kazakhstan – England
Company PB Kennedy and Donkin Limited, of the UK, London
Position Project Manager / Deputy lined up
Description Proposal writing, Team member to prepare and submit tender for, EU-TACIS-TRACECA Project " Support to the Development of a Transit Corridors policy in the Republic of Kazakhstan, Project No: TNKAZ 9901

From – to 2000 – ongoing
 Location Kazakhstan, Almaty
 Company Silk Road Consultancy- KAZDORNII (Road Research Institute)
 Position Senior Consultant and Adviser
 Description Responsible for the restructuring process, from design of the methodology over diagnosis and due diligence to developing and implementation of road maintenance policies in Kazakhstan specially and Central Asia generally.

From - to 2000 – 2000
 Location Kazakhstan
 Company MDE- Consult
 Position Team Leader
 Description Market Research on Paintings, Protective and Decorative Coatings available in Kazakstan (Petro-Chemical Industry). Study carried out for Hempel J.C. HEMPEL's SKIBSFARVE-FABRIK A/S Lyngby - Denmark.

1997- 2000

From – to 1997- 2000
 Location Armenia, Azerbaijan, Georgia, Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan Kazakhstan and Mongolia

Company Parkman International Consultants – England, Liverpool

Position Technical Manager, Project Manager, Team Leader

Description **EU-TACIS:** Technical Assistance to the Southern Republics of the CIS and Georgia.

Project: TRACECA Road Maintenance Project – TELREG 9601

Consultants: Finnroad - Parkman Consortium

Technical Assistance to commonwealth of independent States. The task included promotion of the rational allocation of routine maintenance funds in the most economically advantageous way by reinforcement of roads maintenance planning in all states using the Pavement Management System (PMS). Propose realistic and sustainable solutions to carry out routine and periodic maintenance including Winter Maintenance as well as the development of the institutional policy, legal framework for the road sector and foreign assistance in the TRACECA countries.

Responsibilities: Planning and training local counterpart and subcontractors in carrying out Network referencing, Visual surveys by using up to date Data collection devices with Survey Plus software, Bridge conditions assessments, Traffic studies, Mechanical surveys by using FWD (Falling weight Deflectometer) and BI (Bump Integrator) to test the bearing capacity and measurement of road roughness. The collected data was processed into RoSy PMS System to calculate the most economic and rational methods for road maintenance and rehabilitation. Liaison with local beneficiary, subcontractors and other local experts. Employing qualified local sub-contractors to carry out the data collection and arrangement of financial payments.

Task definition country by country:

Azerbaijan (1997) Winter Maintenance & Institutional Reforms

Georgia (1997) Winter Maintenance and Bridge Condition Survey

Tajikistan (1997) Winter Maintenance

Mongolia (1998) Winter Maintenance & Institutional Reforms

Turkmenistan (1998) Winter Maintenance and Bridge Capacity Survey

Armenia (1997-1999) Road, Bridge Maintenance systems and Feasibility Studies

Kazakhstan (1997-1999) Road, Bridge Maintenance systems, Investors Conference and Feasibility Studies

Kyrgyzstan (1997-1999) Road, Bridge Maintenance systems and Feasibility Studies

Uzbekistan (1997-1999) Road, Bridge Maintenance systems and Feasibility Studies

From - to 1997 April-
 Location Macedonia FYROM – Skopje
 Company Parkman International, World Bank financed project
 Position Data Collection Team Leader
 Description Introduction of Road and Bridge Rehabilitation Systems and set up new institutional framework for Department of Highways. Training the Local on the use of automatic data capturing devices.

From - to 1997 June – July
 Location England – Manchester
 Company Parkman International - Ministry of Transport / Highway Agency
 Position Data Collection Manager
 Description Data collection team in Greater Manchester Highways Network, responsible for daily managing the maintenance activities of the Greater Manchester Highways Network.

From - to 1997 November – December
 Location Armenia – Yerevan
 Company Parkman International – World Bank financed project
 Position Pavement Specialist
 Description Developing and introducing basic principles of routine maintenance by contract which had been agreed upon by Armenian Road Directorate. Preparations for the pilot project routine maintenance by contract have been completed and accepted by the Armenian Road Directorate, TACIS and World Bank

1997

From - to 1997 February- March
 Location Denmark – Copenhagen
 Company Kampsax International, A/S – Denmark
 Position External Adviser
 Description Proposal writing, Team member to prepare and submit tender for, EU-TACIS-TRACECA, Project Road Maintenance, Technical Assistance to the Southern Republics of the CIS and Georgia.

1994-1997

From – to 1994 – 1997
 Location Armenia, Azerbaijan, Georgia, Turkmenistan, Uzbekistan, Tadjikistan, Kyrgyzstan Kazakhstan
 Company Phønix Pavement consultants – EU financed Project
 Position Project Engineer
 Description EU-TACIS: Technical Assistance to the Southern Republics of the CIS and Georgia. Project: TRACECA “Implementation of Pavement Management Systems”, TELREG 9305 Consortium of (KOCKS CONSULT GMBH - TecnEcon UK - Phønix DK) Client: European Union –TACIS, Technical Assistance to commonwealth of independent States. The task included Introducing and implementing The Pavement and Bridge Management Systems (PMS\BMS). Propose realistic and sustainable solutions to carry out routine and periodic maintenance for the Silk Road sections.

Responsibilities: Supplying and providing on-job training for the local counterparts and subcontractors on different filed works with the supplied equipment's. Selecting the pilot sections and carry out fieldwork for Falling Weight Deflectometer (FWD) measurements, visual inspections, traffic \ axle weight surveys and PMS\BMS input data procedures. Development of the institutional policy and legal framework for the road sector in each TRACECA countries.

From - to 1994 – 1995
 Location Denmark – Ulfborg
 Kimo Karini

Company	Phønix Pavement Consultants and Denmark's Technical University
Position	Research Engineer
Description	Research on the different PMS input data for several road authorities in Ulfborg and Vimb Municipalities, Denmark. Carry out a non-destructive testing to determine the bearing capacity, service life and necessary strengthening.
From - to	1995 – November
Location	Germany – Hanover and Wolfburg Counties
Company	Phønix Pavement Consultants
Position	Project Engineer
Description	Advisory and on-the-job training support to PMS units of several road authorities in Hanover and Wolfburg Counties, Germany. Carry out a non-destructive testing of bearing capacity by using Falling Weight Defoectometer (FWD), determine existing service life of the road structure and necessary strengthening.
From - to	1995 – December
Location	Norway – Bergen, Stavanger and Arendal Counties
Company	Phonix Pavement Consultants
Position	Project Engineer
Description	Advisory and training/coaching support to PMS units of several road authorities in Bergen, Stavanger and Arendal Counties, Norway. Carry out a non-destructive testing of bearing capacity by using Falling Weight Deflectometer (FWD), determine existing service life of the road structure and necessary strengthening.
From - to	1994- 1994
Location	Denmark, Copenhagen
Company	Technical University of Denmark
Position	Research Engineer
Description	Specialised studies of roads in Denmark Studies on possible modalities for the road deterioration due to the changes of , traffic flow, climate and under ground water level.
1990	
From - to	1990 – 1990
Location	Denmark – Allerød
Company	Danish Construction Analyses A/S
Position	Application Engineer
Description	Responsibilities: Structural analyses of different concrete and steel constructions by using Finite Element Method. Prepare and produce the necessary technical reports for the clients.
1986-1989	
1979-1986	
From - to	1984–1986
Location	Yugoslavia – Iraq
Company	Project 202-C Military Air Base – Yugoslavian Consultants
Position	Resident Engineer
Description	Site supervision (Highways and Airport Runways). Mobilisation, construction scheduling and monitoring. Leading site teams/ daily attendance. Preparing and revising budgets, schedules and payments preparation of reports, cost control, quality control planning and scheduling, co-ordination of sub-projects and material, manpower and subcontractor assessment and forecasting.

From - to 1981 – 1983
 Location Iraq – Erbil Municipality
 Company Directorate of Structural and Construction Engineering
 Position Site & Research Engineer
 Description Special structural and finishing works; Beams on elastic foundation, Pre stressed bridge design, slip form concert, Folded plates, Shells, Arches. The other tasks involved were; earthworks, landscaping, water supply systems, drainage and sewerage, mobilisation planning, construction scheduling and monitoring, preparation of reports, cost control, quality control and pre-cast factory mobilisation, production and erection.
 The task also comprised sector research study including bid preparation, planning and implementation in several enterprises in the Building and Construction Industry.
 The project encompassed diagnosis, market analysis, rationalisation, strategic repositioning, restructuring- and a management development programme. The project also included analysis of the industrial policy for the Local Construction Industry and a Management Development Programme for that industry.

From - to 1979 – 1981
 Location Iraq, Erbil Municipality
 Company Directorate of Urban & Rural Constructions
 Position Project Engineer
 Description **Urban Projects;** Management of all construction phases to include a 10-floor, a7 floor and a 5-floor building. Tender computing. Site supervision for commercial, industrial and residential. Preparation of drawings, specifications and Bill of Quantities (BQ's).
Rural Projects; Project planning and management of a team of 6 Advisers planning and executing pilot works of a large infrastructure project in Rawanduz, Erbil.

OTHERS

KK has excellent team building and management skills enabling him to manage project teams and companies efficiently. In the course of the many different assignments for private as well as institutional clients KK has written numerous technical, administrative and process reports.

STATEMENT OF EXCLUSIVITY

I, the undersigned, JOHN FOSKETT, present my candidature within the framework of the following tender :

Project title: **Central Asia Border Crossings**

Project Number: **SCR – E/110622/C/SV/WW**

And agree to work exclusively for the consortium:

Computer Solutions/Tractebel/Parkman.

Signed



STATEMENT OF AVAILABILITY

In the event of the award of the contract to the consortium, Computer Solutions/Tractebel/Parkman, I confirm that I am available, able and willing to carry out the duties and work outlined in this tender for all the period of the project implementation as indicated in the Terms of Reference.

Signed





CURRICULUM VITAE

Proposed position in the programme:

Environmental specialist

- 1. Family name:** FOSKETT
- 2. First names:** John Arthur
- 3. Date of birth:** 8 April 1949
- 4. Nationality:** British
- 5. Civil status:** Married

6. Education

Institution:	University of Southampton, England, UK
Date: from - to (month/year)	Sept 1967 - Sept 1970
Degree(s) or Diploma(s) obtained:	Bachelor of Science degree, BSc. with Honours in Civil Engineering

Institution:	The Open University, Milton Keynes, England, UK
Date: from - to (month/year)	1975 - 1980
Degree(s) or Diploma(s) obtained:	Bachelor of Arts degree, BA. with Honours in History and Philosophy

7. Language skills: (Mark weak, good, excellent for competence)

Language	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
French	Fair	Weak	Fair

8. Membership of professional bodies:

Chartered Engineer, Member of the Institution of Civil Engineers, UK (1986, MICE)

9. Other skills: (e.g. Computer literacy, etc.)

Proficient with Project management software - Microsoft "Project", Symantec "Timeline" and Monte Carlo method of risk appraisal. Competent with "Wordperfect", "Word", "Excel" and "Lotus 123".

10. Present position: Project and Marketing Manager

11. Years within the firm: 5

12. Key qualifications: (Relevant to the commission)

- Detailed, practical familiarity with environmental appraisal to EC standards;
- Experienced in Environmental Impact Appraisal of road schemes
- Experienced in the design of mitigation measures to reduce environmental impacts.

13. Summary of relevant experience:

Country	Date: from (month/year) to (month/year)
Kyrgyzstan, Uzbekistan and Tadjikistan	July 1997 - June 1998 and 1999
Albania	Jan 1997 - July 1997



14. Professional Experience Record:

Date:	Jan 1997 - July 1997
Location	Albania
Company	Parkman Ltd
Position	Assistant Project Manager/ Environmental specialist
Description	Environmental impact appraisal for feasibility study phase Proposed environmental mitigation measures. Rehabilitation and reconstruction of 80 km of road with two new bypasses. Study element of scheme was substantially completed before the project was temporarily suspended due to civil unrest. EC PHARE programme.

Date:	July 1997 - June 1998
Location	Kyrgyzstan, Uzbekistan and Tadjikistan
Company	Parkman Ltd
Position	Highway Engineer
Description	TRACECA: Roads Maintenance Project, Module E - Central Asia "Silk Routes" (Part of the European Union's TACIS programmes) Pre-Feasibility Studies of three road and three rail projects - including project planning, engineering assessment and cost estimates for the road schemes (corridors 485 - 730 km long). Site visits to corridors.

Date:	1986 - Sept 1995
Location	Manchester, UK
Company	Department of Transport, Highways Agency, UK Government
Position	Project Manager
Description	11 Major Highway projects in the UK, including: <ul style="list-style-type: none"> • Widnes Bypasses, North and South • Macclesfield Relief Road • M56 Widening, J4 -6 • Nantwich Bypass • Weaverham Bypass • A41, Chester Improvement • Basford, Hough , Shavington Bypasses • M63 Widening, J6 - 9 • M6, Thelwall Widening J20 - 21a • A556 Improvement M6 - M56 Supervised Consulting Engineers undertaking major road projects Major surveys undertaken including ecology, archaeology, air quality, noise, agricultural). Detail design completed leading to publication of draft Orders, Environmental Statement (to European Union standards) and Public Inquiry. Environmental statements included full Impact Appraisals and proposals for mitigation measures as an integral part of the scheme designs. Delivered environmental evidence at Public Inquiry.

15. Others:

Lectured to civil engineering undergraduates at the University of Manchester Institute of Science and Technology (UMIST) UK. Specialist subject: "The environmental appraisal of major highway projects". June 1993 - 1995

Transportation Division

avenue Ariane 7
B-1200 Brussels (Belgium)
Tel. + 32 2 773 75 11
Fax + 32 2 773 79 90

CERTIFICATE

We hereby certify that the professional experience indicated in the CV of Mr. Mike Sims is true.

Mike Sims works for our company on a full time basis since the year 1993.



I. de Saint Moulin,
Director of Transport Division

STATEMENT OF EXCLUSIVITY

I undersigned,*Michael SIMS*....., present my candidature within the framework of the following call for tender:

Project title: **Central Asian Border Crossings**

Tender Number: **SCR-E/110622/C/SV/WW**

I commit myself to working exclusively for the tenderer Computer Solutions and Tractebel Development Engineering, in association with Parkman Limited.

Signature:



Date:

31/01/2001

STATEMENT OF AVAILABILITY

I undersigned,*Michael SIMS*....., undertake to be able and willing to work for all the period of implementation of the project indicated in the terms of reference, in the event of award of the contract to the tenderer Computer Solutions and Tractebel Development Engineering, in association with Parkman Limited, that has presented me as candidate for the project: Central Asia Border Crossings :Tender number : SCR -E/110622/C/SV/WW

Signature:



Date:

31/01/2001

THE AMERICAN
Society of Civil Engineers



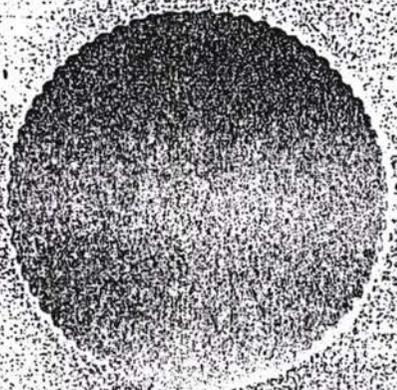
BY THIS DIPLOMA CERTIFIES

That Michael Sims

is a Member of said
Society and fully entitled to all the privileges granted in its Constitution

James C. Sawyer President

Edward C. Pfanz Secretary



(Miss)

DATE OF MEMBERSHIP January 1, 1991

Nous, Président, Secrétaire et membres du jury, chargés par la Faculté des Sciences appliquées de Mons, de l'Université catholique de Louvain, de l'Université de Liège et de l'Université libre de Bruxelles de conférer le diplôme de

Maîtrise interuniversitaire en gestion des Transports

Vu le règlement organique pour la collation des grades scientifiques;

Attendu que Monsieur Michael Sims

né(e) à Enfield (R-U), le 16.11.1947 est porteur d'un diplôme d'Ingénieur Civil

Attendu qu'il(elle) a subi avec distinction le 20.08.1993, l'épreuve conférant le grade de Maître en gestion des Transports portant sur les matières suivantes :

Analyse de la demande; Méthodes de détermination des flux de trafic; Analyse technico-économique des systèmes de transport; Economie des transports; Techniques de transport; Géographie des transports; Droit lié aux transports et systèmes institutionnels; Evaluation des impacts socio-économiques; Localisation des activités économiques; Législation sur les marchés publics; Transport et environnement; Gestion et analyse opérationnelle; Etablissement d'un plan transport; Introduction aux sciences et technologies.

Avons conféré et conférons à Monsieur Michael Sims

le grade de **Maître en gestion des Transports**

En foi de quoi, nous lui avons délivré le présent diplôme, attestant en même temps qu'il(elle) a été réellement élève de la Maîtrise interuniversitaire en gestion des transports, et que les prescriptions du règlement précité, quant à la durée des études, ont été observées.

Signature du titulaire,

Fait à Bruxelles, le 17.09.1993

Le secrétaire,

Le Président,

Les membres du jury,

Vu par nous, Recteurs de

la Faculté polytechnique de Mons

l'Université catholique de Louvain

l'Université de Liège

l'Université libre de Bruxelles

THE INSTITUTION OF CIVIL ENGINEERS

Established 1818

Incorporated by Royal Charter 1828

This is to certify that

MICHAEL SIMS, B.Sc. (Salford)

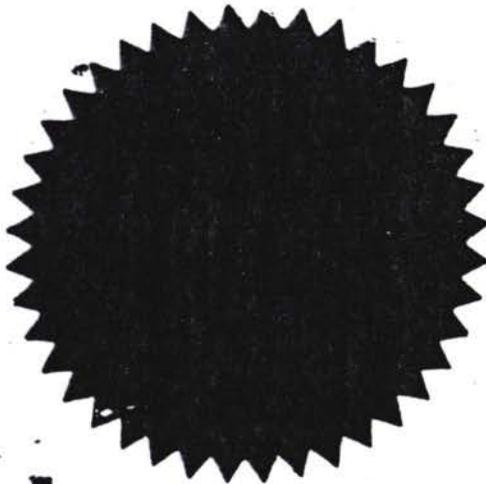
was on 9th MARCH 1976 admitted a

MEMBER

of

THE INSTITUTION OF CIVIL ENGINEERS

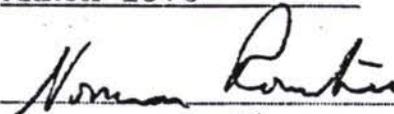
A Society established for the general advancement of Mechanical Science and more particularly for promoting the acquisition of that species of knowledge which constitutes the profession of a Civil Engineer, being the art of directing the great sources of power in Nature for the use and convenience of Man.



WITNESS our hands and Seal at

Westminster, this 10th day of

MARCH 1976



President



Secretary

Monsieur Michael SIMS
rue des Infirmeries, 18

5310 DHUY

DECISION D'ADMISSION A L'UNIVERSITE LIBRE DE BRUXELLES

ANNEE ACADEMIQUE 1995-1996

INSTITUT DE GESTION DE L'ENVIRONNEMENT
ET D'AMENAGEMENT DU TERRITOIRE

Bruxelles, le 23 Août 1995

Concerne : Monsieur Michael SIMS
de nationalité : britannique
né(e) à : Enfield (Grande-Bretagne)
le : 16 Novembre 1947

Monsieur Michael SIMS, porteur d'un diplôme de Bachelor of Science (Civil Engineering), délivré par l'University of Salford le 17 Juillet 1969, est admis à prendre une inscription et à suivre les cours du **Diplôme d'Etudes Spécialisées en Gestion de l'Environnement** pour l'année académique 1995-1996.

Le premier cours aura lieu le **lundi 18 septembre 1995 à 17h15** au local UB2.147 (bâtiment U, porte B, 2ème niveau, local 147), accès par l'avenue Antoine Depage (1050 Bruxelles) et le square Jean Servais.

Divers documents d'information (horaire, règlements, ...) seront distribués lors de la brève séance d'introduction qui précédera le cours.



Professeur Philippe BOURDEAU
Président de l'IGEAT

* Document manquant : attestation de l'employeur.

Code Subs. :
MATRI :
CODA : ENVI38
GOBN :

DROIT D'INSCRIPTION: 25.550,-F.B.

ENVOI DU BUREAU DES ADMISSIONS ET EQUIVALENCES LE: 29 AOUT 1995

CET ORIGINAL DOIT ETRE CONSERVE PAR L'ETUDIANT JUSQU'A LA FIN DE SES ETUDES.
LE DOUBLE ORIGINAL EST REQUIS POUR L'INSCRIPTION A L'UNIVERSITE.



CURRICULUM VITAE

Proposed position in the programme : Specialist HDM4 - Training

1. Family name : SIMS
2. First names : Michael
3. Date of birth : November 16th, 1947, United Kingdom
4. Nationality : British
5. Civil status : Married, 2 children

6. Education

<i>Institution</i> <i>Date : from (month/year) :</i> <i>to (month/year)</i> <i>Degree(s) or Diploma(s) obtained</i>	University of Birmingham April 2000 Certificate; Trainer's Course in HDM4, the most recent version of the World Bank's Highway Development and Management software.
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<i>Institution</i> <i>Date : from (month/year) :</i> <i>to (month/year)</i> <i>Degree(s) or Diploma(s) obtained</i>	University of Brussels (ULB) October 1992 July 1993 Master of Science in Transport Management
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<i>Institution</i> <i>Date : from (month/year) :</i> <i>to (month/year)</i> <i>Degree(s) or Diploma(s) obtained</i>	University of Brussels (ULB) October 1992 December 1995 Various short courses in Project Management, Business Studies, and Environmental Management
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<i>Institution</i> <i>Date : from (month/year) :</i> <i>to (month/year)</i> <i>Degree(s) or Diploma(s) obtained</i>	University of Salford, United Kingdom September 1964 June 1969 Bachelor of Science in Civil Engineering
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7. Language Skills

Language	Reading	Speaking	Writing
English	5	5	5
French	5	5	5
Russian	2	2	1

8. Membership of Professional Bodies

- Chartered Engineer, Institution of Civil Engineers, London, 1976
- Member of the American Society of Civil Engineers

9. Other Skills

Computer literacy, use of common and special applications software (O.R, P.M., HDM4, case tools, ...)

10. Present Employer and Position

Project Manager
Transportation Division
Tractebel Development Engineering

11. Years with the present employer : 7

12. Key Qualifications

Mr.Sims possesses over twenty five years international experience in the development of transportation infrastructure and systems. This has involved employment with large consultancies, contractors and extensive experience in dealing with national authorities and the international funding agencies.

Domains of professional activity have included :

- Physical development of transport infrastructure, as a contractor, and as a contract manager.
- Evaluation, design and organisation of improvements to highways, railways and associated infrastructure in divers physical and institutional environments.
- Promotion of transport projects at political and multi-lateral funding agency level.
- Re-structuring, re-organisation and re-equipment of transport sector maintenance and operations activities.
- Institutional development of government agencies for policy, regulation and operation of transport and trade activities. This involves promotion of legislative reform, adherence to and implementation of international trade and transport conventions, human resources development.
- Corporatisation, commercialisation, privatisation.
- Prolonged participation in several very large scale intermodal/interregional traffic and transport developments for persons and goods (Central Asia-Caucasus-Europe Corridor, Paris-EuroDisney, Brussels urban transport, industrial and bulk transport systems-Southern Africa.

13. Specific Central and Eastern European and NIS Experience :

Country	Date : from (month/year) to (month/year)
Caucasus & Central Asia	1995 – 2000
Mongolia	1998 (mission)
Czech Republic	1994 – 1997 (missions)
Hungary	1994 (mission)
Romania	1994 (mission)
Slovakia	1994 – 1997 (missions)
Slovenia	1994 – 1997 (missions)

14. Professional Experience Record

Date	1993 – 2000
Location	Brussels – Belgium
Company	Tractebel Development Engineering, a diversified consultancy, headquartered in Belgium with international operations
Position	Project Manager
<i>Description</i> CENTRAL ASIA (Oct/Aug 2001 part time interventions) Project manager for the supervision of Rehabilitation of Aktau Port Ro-Ro Ferry Terminal. Contract carried out under FIDIC Design – Build conditions of contract. Scope of work includes mechanical, electrical, structural and civil rehabilitation of a rail and road ro-ro ferry ramp, service facilities for vehicular and passenger traffic, customs and immigration etc.	

CENTRAL ASIA*(September/January 2001 two missions)*

Economic and financial analysis of improvements to railways telecommunications systems, including a 630 km fibre optic cable and associated switching stations, as part of a feasibility study prepared on behalf of the Asian Development Bank and local railway operating companies, with TACIS funds. Identification and evaluation of rail operating and management benefits.

CAUCASUS and CASPIAN SEA BASIN**2000 (1,5 months total)**

Missions to Armenia, Georgia, and Azerbaijan for identification, evaluation and definition of potential transport sector TA and grant investment projects for financing by the EU TACIS programme (rail and road maintenance, facilities at the ports of Poti, and Batoumi.). Evaluation of a tender for works at the port of Aktau, Kazakhstan (rail and road ferry ramp rehabilitation), financed by the TACIS programme.

CENTRAL ASIA**Since 1996**

Based in Tashkent as Project Manager.

Establishment and management of regional co-ordination offices for TRACECA, a transportation technical assistance program involving the eight Central Asian and Caucasian Republics of the CIS plus Mongolia and the Ukraine. The activities hereunder comprise the field implementation phase of the development of the TRACECA program, of which the initial phases are detailed after (see also web site TRACECA.ORG).

The responsibilities and functions included establishment and development of working contacts with governments at Ministerial level, assistance in formulation of policy, legislative reform, negotiations for the implementation of related technical and grant assistance, writing TOR, evaluation and supervision of consultancy, works and supply contracts (value of contracts over three years exceeding 50 MUSD).

Close collaboration with IFI, particularly the EBRD, for feasibility studies, restructuring support, and contract preparation.

The TRACECA program was extended into direct assistance for equipment and works procurement, particularly for intermodal transport (procurement of equipment for container handling, ro-ro, ferry terminals, spare parts for ferries, and essential infrastructure works, 27 MUSD) related responsibilities were identification of project components, preparation of technical specifications, preparation of procurement tender documents according to EC rules, and administration of the contracts.

Specific projects include :

Roads feasibility studies; seven rehabilitation projects for EBRD, and WB

Roads and Rail pre-feasibility studies; several projects for new links

Roads Department Institutional Restructuring; project elements in several TRACECA countries

Chardzev Bridge Feasibility Study; major new/replacement road and rail combined bridge, Turkmenistan

Intermodal Equipment; provision of works and equipment

Training Programs; various, for all transport sectors

Transport Legal and Regulatory Framework; model laws, a multi-lateral agreement, and international conventions

Traffic Forecasting; data base and traffic forecasting model

Road Transport Services; technical assistance to operators and regulators

International Road Transport Transit Facilitation; operator/management certification and implementation of TIR convention

Trade Facilitation; border crossing survey, appraisal and recommendations for documentation

Pavement Management Systems; assistance to introduce methods

Winter Maintenance Systems; (roads) assistance to introduce methods and feasibility studies

Intermodal Transport; appraisal of infrastructure, equipment and methods

Intermodal Services; feasibility study and pilot operational support for commercial services

Bukhara Cotton Logistics Centre; equipment supply and organisational training

Railways Infrastructure Maintenance; appraisal

Rolling Stock Maintenance; appraisal

Tariffs and Timetables; assistance to modernise cost accounting and commercial practices

Railways Restructuring; two projects for restructuring plans for eight national railways

Ports, Ferry Terminals, and Oil Loading Facilities; master plan, rehabilitation feasibility studies, procurement documents, Baku, Turkmenbashi, Aktau, Poti, Batumi

BELGIUM (Brussels) - TACIS (Technical Assistance to the CIS) - E.U.**(1993-1997)**

18 months duration with frequent extended missions to the CIS.

Team Leader for the TRACECA (Transport Corridor Europe Caucasus Asia or the "silk route") program management. TRACECA started as over twenty consultancy projects with a total value of approximately 25 MUSD. Technical assistance was provided to the Ministries of Transport in Central Asia and the Caucasus. Assistance was oriented to three related objectives: the encouragement of investment from IFI or private sources, the promotion of operating efficiencies in transportation systems by institutional or technical improvement, the transfer of know-how. The focus of the programme has been placed on freight shipments along the axis linking Europe to Poti (Georgia)-Baku-Krasnovodsk-Aktau-Tashkent-Almaty (Kazakhstan)-Druzbha (Chinese border). Projects include feasibility studies for ports, railway maintenance, railway operating agreements (cross-border services, tariffication, block trains, ...), road maintenance, road transport facilitation, regulatory development, task forces to assist cotton exports, cereals imports, ... Projects are carried out by contracted consultants (\pm 200 short and long term participants mobilised). Investment of over 300 MUSD is foreseen to follow from the feasibility studies and other enabling actions within the program Several regional transportation agreements, JV links etc, sponsored by the program are concluded or under discussion.

Tendering and negotiation of this and the above management contracts on behalf of Tractebel.

BRUSSELS REGIONAL ADMINISTRATION - E.U.**(1993-1997)**

Technical assistance to the CITIES Advanced Transport Telematics project in Brussels, Paris and Gothenburg, which was sponsored by the EU and developed intelligent road traffic and public transport operating systems.

Particular responsibilities for project management and comparative system evaluations for cost efficiency, environmental and safety impacts.

Trials of user information systems for bus, metro and the urban road network.

Organisation of a demonstration of RDS-TMC (Radio Data System-Traffic Management Channel) for the G7 Information Society conference in Brussels, with Volvo, Swedish National Roads Administration, a local radio station and authorities.

Installation and appraisal of Prodyne traffic light controllers at 25 intersections in central Brussels

Technical assistance to a sub-project of CITIES to design and specify a traffic management active database for the Brussels region, to function with the regional IRIS transportation model. Worked in team effort with database experts; responsibilities included functional requirements, data structures, process algorithms, terms of reference for hardware and software procurement.

PHARE - CZECH REPUBLIC, HUNGARY, ROMANIA, SLOVAKIA, SLOVENIA**(1993-1997)**

Missions to Ministries of Transport, establishment of relations with local agents, and background research for several Technical Assistance tenders, including two successful bids (Danube Corridor Study and a transport training program, both financed by the PHARE program).

<i>Date</i>	1969 – 1992
<i>Location</i>	
<i>Company</i>	With other Companies
<i>Position</i>	
<i>Description</i>	
<p>CAMEROON - DHV CONSULTANTS (Holland) - WORLD BANK (1992) Preparation of a feasibility study for the evaluation of the design and funding proposals for an 11 km city to airport motorway project serving the city of Yaounde, working with a transport economist.</p> <ul style="list-style-type: none"> - developed alternative solutions with full economic analysis (HDM); - presented a technical and financial report to Bank officials and Cameroon Government Ministers. 	
<p>BELGIUM - RESIDENTIA S.A. - PRIVATE SECTOR INVESTOR (1989-1991) Project Manager for the development of a 20 ha urban extension near Waterloo, Brussels. Oversaw preparation of tender documents, selected tenderers, negotiated contracts and supervised work. Extensive outstanding contractual claims resolution.</p>	

FRANCE – LEHRER MC GOVERN BOVIS INTERNATIONAL (Private Sector Investor) (1989-1991)

The employer was the Contract Manager for the development of Euro Disneyland, Paris. Project Manager responsible for "visitors entry sequence", involving public access facilities from parking through to "Liberty Square" on "Main Street USA", as well as the considerable specific problems related to the construction phase. Technical co-ordination of local consultants, French Authorities for local transport infrastructure development (RATP, TGV, road network), and international contractors. Works were contracted using the FIDIC model contract.

SOUTHERN AFRICA – ENTERPRISES SWANEPOEL (1976-1989)

(Civil Engineering Contractor based in Pretoria and Likasi, Zaire) Chief Engineer. Managed construction projects related to the mining, industry and infrastructure for state and international agencies.

General responsibilities consisted of :

- participating in enterprise management, technical and financial planning;
- site management;
- preparing, costing and presenting tenders, to FIDIC and comparable contract models
- maintaining records of plant performance;
- preparing certificates for payment;
- establishing and running an engineering office;
- promoting local staff development;
- implementing computerisation of technical functions;
- planning maintenance facilities, stores and procurement logistics for companies own plant fleet (\pm 100 units)

Examples of projects

- Planned and monitored operations for 4 m³/yr overburden removal sub-contracts by companies own plant, over four years
- Planned and supervised routine roads maintenance works, by traditional contract as well as under varied plant management arrangements
- Construction managed 14 km of residential roads and township services in Pretoria
- Construction managed a 4 km road widening to dual carriageway in Pretoria
- Designed and construction managed pipelines, tailings dams and river diversions for mining operations
- Engineered 10 km rail-road-power line access corridor to new ore bodies in Kambove, Zaire: 200.000 m³ earthworks, 80 m tunnelled river diversion
- Engineered 40 km of major haul roads for mining companies, design and construct; propositions included an operational model based on measured vehicle operating costs and maintenance projections
- Engineered low cost roads and bridges for drilling campaigns and mine development access
- Engineered & construction managed 65 km of bitumen surfaced road rehabilitation in Southern Zaire (WB financed).
- Redesigned and construction managed rehabilitation of two 18 m composite steel concrete bridges, and one new 16m RC bridge on Likasi-Kolwezi and Lubumbashi-Kasumbalesa roads in Zaire (WB financed).
- Analysed ore transport options; road, rail, cableways : feasibility studies and designs of mixed road-rail-conveyors solutions
- Collaborated with haul vehicle manufacturers on performance assessments

ZAIRE – MINING CONSORTIUM AAC, AMOCO, SUMITOMO (Private Sector Enterprises)1972-1976

Development of a \$1 000 MUSD copper-cobalt mine, metallurgical plant and township on a green field site in Zaire. Appointed as a Project Engineer:

Directed topographical and geotechnical survey.

Supervised construction of rail link and sidings, access roads, air-strip, drainage, power, water supply, stabilisation ponds, industrialised housing, crusher, batch plant and precast concrete yard.

Co-ordinated construction of a pilot plant and a section of the main metallurgical plant.

Multidisciplinary engineering experience, introduction to major site organisation and logistics

SOUTHERN AFRICA - BRIAN COLQUHOUN & Partners**1969-1972**

Prepared the feasibility study for a 7 km section of motorway including site investigation, land use impact evaluation and a detailed economic analysis, the first carried out in S.A. (Department of Transport)

Participated in the conceptual and detailed design of :

- Durban bayhead rail freight complex (South African Railways).
- Johannesburg new produce market access, road and rail (Johannesburg Municipality).
- A road over rail bridge Tzaneen, N.E. Transvaal (DOT).
- Witwatersrand University roads and pedestrian area redevelopment.
- Residential and industrial site developments, urban and rural road improvement.
- Industrial plants and buildings, including R.C. and steelwork design for cement works, Beira, Mozambique, steelworks, Vanderbijlt Park, R.S.A.
- Environmental engineering, sewerage and water reticulations, stabilisation ponds, Durban and Mbabane, Swaziland.
- A new township for a population of 40 000, later seconded to the site in Zaire, see above.

15. Others :

Annex C2: Summary List of Local Experts

Name of the expert	key	Present Employer and Position	Years of Experience	Age	Nationality	Educational Background	Specialist Areas of Knowledge	Experience in the Beneficiary State	Languages and Degree of Fluency (VG, G, W)
BEKMAGAMBETOV M.		Scientific and Research Institute for Road Transport Director Consult LTD President	29	54	Kazakh	Engineer Road Haulage and Traffic Safety Candidate Technical Sciences	Mechanical engineering Transport Legislation Road transport development and implementation Traffic forecast Urban transport	Kazakhstan	Russian - VG Kazakh - VG German - G
KAPLAN E.		Scientific and Research Institute for Road Transport Deputy Director Consult LTD Managing Director	11	39	Russian	Postgraduate Transport and Highway Engineering Ph.D. in Transport Transport & Highway Engineering	Transport and Highway Engineering Transport privatisation Urban passenger transport Modernisation Sea transport development Transport corridors	Kazakhstan	Russian - VG English - VG
BOGDANCHIKOV A.		Scientific and Research Institute for Road Transport Head of Department	24	48	Kazakh	Mechanical Engineer	Mechanical Engineering Ecological problems of road transport Forecast of traffic Road freight transport Transport and Environment	Kazakhstan	Russian - VG English - G
SOBOLEV I.		Scientific and Research Institute for Road Transport Engineer	1,5	23	Kazakh	Mechanical Engineer	Information Technology Linear programming	Kazakhstan	Russian - VG English - G Kazakh - G
IMANSEITOVA R.		Scientific and Research Institute for Road Transport Senior Expert	28	50	Kazakh	Economical Engineer	Freight transport Customs procedures Multi-purpose container carriage	Kazakhstan	Russian - VG Kazakh - VG German - G
MELSITOVA T.		Ministry of Public Revenues Republic of Kazakhstan Senior Expert	20	46	Kazakh	Economical Engineer	Economical engineering Analysis and Planning Custom statistics Transport and custom statistics	Kazakhstan	Russian - VG Kazakh - G French - G
SULEIMENOVA S.		Kazakhstan Freight Forwarders Association (KFFA) Executive Director	6	37	Kazakh	Economical Engineer	Freight forwarding FIATA documents Transport documents Customs procedures Transport operation contracts	Kazakhstan	Russian - VG English - VG Kazakh - VG
IVANOV A.		Scientific and Research Institute for Road Transport Lawyer	3	23	Kazakh	Lawyer	Specialized in civil (commerce) law, Freight forwarding and transport problems	Kazakhstan	Russian - VG English - VG Kazakh - G
BEKMAGAMBETOV G.		Scientific and Research Institute for Road Transport Economical Expert	6	28	Kazakh	Bachelors Degree Management 3-rd year student lawyer	Economic and Management expert Share registration consultant	Kazakhstan	Russian - VG English - VG Kazakh - VG
ALDABERGENOV B.		Scientific and Research Institute for Road Transport Senior Expert Consult LTD Consultant	22	54	Kazakh	Postgraduate Transport and Highway Engineering Ph.D. in Transport Transport & Highway Engineering	Transport engineering Specialised in transport, legislation, transport sector reforming and privatization		Russian - VG English - G Kazakh - VG
ISHENALIEV R.		Louis Berger International Project engineer		39	Kyrgyz	B.Eng. (Highway and Airfield Engineering) M.Eng. (Transportation) Pavement Management Systems Courses	Highways engineering Software and Pavement Management Systems Specialist	Kyrgyzstan	Russian -VG English -VG Kyrgyz - VG

CURRICULA VITAE

Local Experts

CURRICULUM VITAEProposed position in the program: **LOCAL TEAM LEADER**

1. **Family name:** Bekmagambetov
2. **First name:** Murat
3. **Date of birth:** 23 September 1946
4. **Nationality:** Kazakh
5. **Civil status:** married
6. **Education:**

Institution	Pavlodar Industrial Institute, Faculty of Road Haulage and Traffic Safety
Date: From To	September 1964 July 1969
Degree or Diploma obtained:	Diploma

Institution	Moscow Road Transport Institute, Post Graduate Courses
Date: From To	1974 1977
Degree or Diploma obtained:	Degree: Candidate of Technical Sciences

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
Kazakh	4	5	4
German	4	3	2

8. **Membership in professional bodies:**

- Member of the Board in the Ministry of Transport of the Republic of Kazakstan (1993-1994),
- Member of the Council for Road Transport in the Ministry of Transport of the Republic of Kazakstan (currently),
- Member of Transport Academy of Russian Federation (currently).

9. Other skills: (e.g. computer literacy, etc.)

Computer literacy on the user level.

10. Present position:

Director General and President of a JSC "Scientific and Research Institute for Road Transport",
President of a Private Company "Consult LTD".

11. Years within firm:

Since 1977 with the Institute
since 1995 with a private Company

12. Key qualifications:

Mechanical Engineer, Candidate of Technical Sciences, Member of the Russian Transport Academy, Chairman of the State Examination Commission at the Transport Academy of the Republic of Kazakhstan.

13. Specific Eastern Countries experience:

Country	Date: from - to
Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Georgia, Azerbaijan	1996 – 1997 TRACECA Program "Reforming and Unification of Transport Legislation" – prime contractor "Scott Wilson Kirkpatrick"

14. Professional Experience Record:

Date: From To	Since 1992 Ongoing
Location	Kazakhstan
Company	JSC "Scientific-Research Institute for Road Transport"
Position	Director General, President
Description	<p>Involvement in international projects:</p> <p>USAID: Program for Road Transport Privatisation in the Republic of Kazakhstan (small and mass privatisation) Earnest & Jang;</p> <p>EBRD: Road Transport restructuring and privatisation, ATKINS</p> <p>Rehabilitation of the Aktau sea port (SWK) Program of urban passenger transport reforming (in 7 cities)</p> <p>IBRD: Upgrading of Management for urban passenger transport (in 3 cities), Louis Berger;</p> <p>Rehabilitation of the highway leading to Akmola (SWK);</p> <p>TACIS: Technical assistance to the Ministry of Transport in Law reforming, SWK;</p> <p>TRACECA:</p> <ol style="list-style-type: none"> 1. Reforming and Unification of legislation in 8 countries, SWK 2. Traffic Forecast Model, ATKINS, BCEOM 3. Road Transport, Alexander Gibb LTD

Date: From To	1985 1992
Location	Kazakhstan
Company	KazAvtoTransTechnica" Scientific-Industrial Association
Position	Deputy Director General
Description	Scientific-Technical programs for road transport development and implementation

Date: From To	1983 1985
Location	Kazakhstan
Company	Scientific and Research Institute
Position	Deputy Director
Description	

Date: From To	1977 1983
Location	Kazakhstan
Company	Scientific and Research Institute
Position	Senior Expert, Head of agricultural goods carriage Sector
Description	Investigation of the problem of container carriage, development of rational ways and technologies of agricultural goods carriage.

Date: From To	1974 1977
Location	Moscow, Russian Federation
Company	Moscow Road Transport Institute, Chair of Road Transport Haulage
Position	Post Graduate Courses
Description	Thesis: "Study of the Problem how to organise container carriage in transport nodes"

Date: From To	1971 1974
Location	Kazakhstan
Company	Kazakhstan Scientific and Research Institute for Road Transport, Freight Transport Department
Position	Junior Expert
Description	Was involved in the problem of container and inter-city haulage by road transport, participated in the Programme for automation of goods handling

15. Publications: 10 publications in scientific-technical magazines and other periodical press.

CURRICULUM VITAE

Proposed position in the programme: **LOCAL PROGRAMME MANAGER**

1. **Family name:** KAPLAN
2. **First names:** Eduard
3. **Date of birth:** 22 December 1961
4. **Nationality:** Russian
5. **Civil status:** married
6. **Education:**

Institution	Moscow Transport and Highway Institute (MADI), Moscow, Russia
Date: From To	1979 1984
Degree or Diploma obtained:	Diploma Postgraduate Study

Institution	Moscow Transport and Highway Institute (MADI), Moscow, Russia
Date: From To	1984 1988
Degree or Diploma obtained:	Ph.D. in Transport

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
English	4	4	5

8. **Membership of professional bodies:**

No

9. **Other skills: (e.g. Computer literacy, etc.):**

Computer user level

10. **Present position:**

Deputy Director of JSC "Research Institute for Transport"
Managing Director of Consult Ltd.

11. Years within the firm:

Since 1989 with the Institute;
since 1995 with Consult Ltd.

12. Key qualifications:

Management, economics, marketing, legislation, privatisation.

13. Specific Eastern Countries experience:

Country	Date: from - to
	Since 1993 – ongoing Participation in 15 different projects on transport privatisation, urban passenger transport, modernisation, sea transport development, transport corridors Traceca, marketing studies for the projects and programmes of USAID, Tacis, World Bank, EBRD (Post Privatisation Fund GIMV).

14. Professional Experience Record:

Date: From To	Since 1988 ongoing
Location	Kazakhstan
Company	Scientific and Research Institute for Transport
Position	Head of Department and Deputy Director General
Description	Managing the Institute's affairs, marketing, customer relations

Date: From To	1996 1997
Location	Kazakhstan
Client	BDPA-SCETAGRI / EU-Tacis
Position	Regional Coordinator
Description	Technical Dissemination Project

Date: From To	1996
Location	Kazakhstan
Client	Scott Wilson Kirkpatrick / European Bank for Reconstruction and Development
Position	Regional Coordinator
Description	Institutional Development of Port Aktau

Date:	From To	1995 1996
Location	Kazakhstan	
Client	Louis Berger / World Bank	
Position	Regional Coordinator	
Description	Institutional Strengthening of Urban Passenger Transport in Almaty, Karaganda, Shymkent	

Date:	From To	1995 1996
Location	Kazakhstan	
Client	Scott Wilson Kirkpatrick / European Bank for Reconstruction and Development	
Position	Consultant	
Description	Legislation Improvement in the Transport Sector	

Date:	From To	1995 1996
Location	Kazakhstan	
Client	WS Atkins International / European Bank for Reconstruction and Development	
Position	Consultant	
Description	Modernisation of Urban Passenger Transport Performance and Organisation	

Date:	From To	1993 1995
Location	Kazakhstan	
Client	Allen and Hamilton / USAID	
Position	Consultant	
Description	Privatisation of Freight Road Transport in Kazakhstan	

Date:	From To	1994
Location	Kazakhstan	
Client	Ernst and Young / European Bank for Reconstruction and Development	
Position	Consultant	
Description	Structural Reorganisation of Kazakhstan Freight Transport	

Date: From To	1994
Location	Kazakhstan
Client	CARANA / USAID
Position	Consultant
Description	Small Privatisation in Kazakhstan

15. Others: Trained in England, Holland, Belgium, USA with Certificates confirming the training on the basis of these programmes.

Publications: He has published more than 30 publications.

CURRICULUM VITAE

Proposed position in the programme: **DATABASE/MODELING EXPERT**

1. **Family name:** Bogdanchikov
2. **First name:** Alexander
3. **Date of birth:** 13 March 1952
4. **Nationality:** Kazakhstan
5. **Civil status:** married
6. **Education:**

Institution	Kazakh State University
Date: From To	September 1971 June 1976
Degree or Diploma obtained:	Diploma

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
English	4	3	3

8. **Membership of professional bodies:**

No

9. **Other skills:**

MS Word, MS Excel

10. **Present position:**

JSC "Research Institute for Transport", Head of Department

11. **Years within the firm:**

since 1976 with the Institute

12. **Key qualifications:**

engineer – mechanic, ecologist

13. Specific Eastern Countries experience:

(* donates experience in conducting training for nationals of the respective country)

Country	Date: from - to
CIS countries	1985 – 1989

14. Professional Experience Record:

Date: From To	1976 Ongoing
Location	Kazakhstan
Client	JSC Research Institute for Transport
Position	Head of Department
Description	Ecological problems on the road transport

Date: From To	1996 1998
Location	Kazakhstan
Client	WS Atkins International
Position	Specialist on modeling
Description	Regional data base and forecast model of traffic

Date: From To	1994 1997
Location	Kazakhstan
Client	SGS – Kazakhstan Ltd.
Position	Expert
Description	After-delivery inspection of urban buses

Date: From To	1994 1995
Location	Kazakhstan
Client	Booz Allen and Hamilton
Position	Consultant
Description	Road freight transport privatization

Date: From To	1994 1994
Location	Kazakhstan
Client	HASKONING
Position	Consultant
Description	Working seminars "Transport and Environment"

15. Others:

Trained in France with Certificate confirming the training on the basis of these programmes.

Publications: he has 21 publications.

CURRICULUM VITAE

Proposed position in the program: **DATABASE/MODELING EXPERT**

1. **Family name:** Sobolev
2. **First name:** Igor
3. **Date of birth:** 21 February 1978
4. **Nationality:** Kazakhstan
5. **Civil status:** married
6. **Education:**

Institution	Kazakh State University, mechanical mathematics faculty
Date: from to	1995-1999
Degree or Diploma obtained:	Diploma of higher education, Bachelor decree

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
English	3	3	3
Kazakh	3	3	3

8. **Membership in professional bodies:**

No

9. **Other skills:**

(e.g. computer literacy, etc.) Operation systems: MS DOS, Windows 3.1, Windows 95, Windows 98;
MS Office: MS Word, MS Excell, MS Power Point; Photo Shop 5.0, Corel Draw 6.

10. **Present position:**

JSC "Research Institute for Transport", Complex Transport Problems Department, Engineer

11. **Years within firm:**

Since January 2001 year

12. Key qualifications:

During studying at the University, was involved in development of programs using different numerical methods and programming several tasks of linear programming (Turbo Pascal 7.0, Quick Basic and Delphi 4.0).

13. Professional Experience Record:

Date: from to	January 2001
Location	Kazakhstan
Company	Joint stock company "Research Institute of Transport", Complex Transport Problems Department
Position	Engineer
Description	Automation of the information system

Date: from to	01 November 1999 10 January 2001
Location	Kazakhstan
Company	Gymnasium № 130
Position	Teacher
Description	Manage the activity of information and programming section, system engineer

CURRICULUM VITAE

Proposed position in the programme: **Transport Financial Expert**

1. **Family name:** Imanseitova
2. **First name:** Raushan
3. **Date of birth:** 23 February 1950
4. **Nationality:** Kazakh
5. **Civil status:** unmarried
6. **Education:**

Institution	Kazakh Polytechnic Institute
Date: From	September 1967
To	June 1972
Degree or Diploma obtained:	Diploma

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
Kazakh	5	4	4
German	4	3	3

8. **Membership of professional bodies:** no
9. **Other skills:** MS Word, MS Excel
10. **Present position:**
JSC Research Institute for Transport, Freight Transport Department, Senior Expert
11. **Years within the firm:**
since 1978 with the Institute
12. **Key qualifications:**
Economical Engineer

13. Professional Experience Record:

Date:	From	1998
	To	ongoing
Location	Kazakhstan	
Client	JSC "Research Institute for Transport", Freight Transport Department	
Position	Senior Expert	
Description	Investigation of the problem of transport system of the Republic of Kazakhstan integration to the global transport system	

Date:	From	1993
	To	1997
Location	Kazakhstan	
Client	Ministry of Transport, Legal Acts Preparation and Legal Work Department	
Position	Senior Expert	
Description	Drafting different acts of Government and Parliament, instructions for co-ordination Transport inspection with Road police, Tax inspection, Customs committee, Ministry of Ecology and Biological Resources, etc.	

Date:	From	1985
	to	1991
Location	Kazakhstan	
Client	"KazAvtoTransTechnica" Scientific-Industrial Association, Freight Transport Department	
Position	Expert	
Description	Investigation of the problem of container carriage, development of the rational ways for goods' carriage, technology and organisation building goods' carriage	

Date:	From	1977
	to	1984
Location	Kazakhstan	
Client	Research Institute for Road Transport, Freight Transport Department	
Position	Junior Expert	
Description	Investigation of the problem of multi-purpose container carriage, development of rational ways and technologies of building goods carriage	

Date: From to	1975 1976
Location	Kazakhstan
Client	Ministry of Non-ferrous metallurgy
Position	Engineer-economist
Description	Planning problems: preparation and analyse of executing Technical Industry Financial Plan

Date: From to	1973 1974
Location	Kazakhstan
Client	Science Academy Mining Institute, mining mechanisation laboratory
Position	Senior Engineer
Description	Investigation of the mechanisation problem, drilling-detonating works

Date: From to	1972
Location	Kazakhstan
Client	Research Institute for Economic
Position	Economist
Description	Investigation of the demography problem

CURRICULUM VITAEProposed position in the programme: **CUSTOMS & STATISTICS EXPERT**

1. **Family name:** Melsitova
2. **First name:** Tatyana
3. **Date of birth:** 8 June 1954
4. **Nationality:** Kazakhstan
5. **Civil status:** unmarried
6. **Education:**

Institution	Almaty National Economy Institute
Date: From To	September 1978 July 1983
Degree or Diploma obtained:	Diploma

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
Kazakh	4	3	3
French	3	3	3

8. **Membership of professional bodies:**

No

9. **Other skills:**

Extensive work experience with a computer

10. **Present position:**

Ministry of Public Revenues of the Republic of Kazakhstan, Analysis and Planning Department, Senior Expert

11. **Years within the firm:**

since 1999 with the Analysis and Planning Department

12. **Key qualifications:**

Economist, she worked at the State Statistic Committee, then at the State Customs Committee. She has a rich experience conducting foreign relations statistic and custom statistic.

13. Professional Experience Record:

Date:	From To	1999 ongoing
Location	Kazakhstan	
Client	Ministry of Public Revenues, Analysis and Planning Department	
Position	Senior Expert	
Description	Foreign relations statistic and custom statistic	

Date:	From To	1995 1999
Location	Kazakhstan	
Client	State Customs Committee	
Position	Head of the Department	
Description	Managing of the Department activity	

Date:	From To	1981 1995
Location	Kazakhstan	
Client	State Statistic Committee of the Republic of Kazakhstan	
Position	Expert, Senior Expert, Head of the Department	
Description	Transport and custom statistic	

CURRICULUM VITAE

Proposed position in the programme: **TRANSPORT DOCUMENTATION, FREIGHT FORWARDING TRAINER**

1. **Family name:** Suleimenova
2. **First name:** Sofiya
3. **Date of birth:** 15 November 1963
4. **Nationality:** Kazakhstan
5. **Civil status:** divorced
6. **Education:**

Institution	Kazakh State University
Date: from to	September 1981 July 1987
Degree or Diploma obtained:	Diploma

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
Kazakh	4	5	4
English	5	5	5

8. **Membership of professional bodies:**

No

9. **Other skills:**

Extensive work experience with a computer.

10. **Present position:**

Executive Director of a Kazakhstan Freight Forwarders Association (KFFA)

11. **Years within the firm:**

since 1997 with the KFFA

12. **Key qualifications:**

Transport documentation, freight forwarding, customs procedures, etc.

13. Professional Experience Record:

Date: from to	August 1997 Ongoing
Location	Kazakhstan
Client	Kazakhstan Freight Forwarders Association
Position	Executive Director
Description	Association management, Public relations, contact with the FIATA, the FIATA documents and forms administration, introduction of the international standards in the practice, contribution to the developing of freight forwarding legislation at the national level, etc.

Date: from to	January 1997 August 1997
Location	Kazakhstan
Client	Mustang Cargo Road Transport Company
Position	Manager
Description	Transport documents and a concerned paper arrangement, relations with the Kazakh Customs, transport operation contracts and market

Date: from to	October 1996 January 1997
Location	Kazakhstan
Client	Austrian Airlines Agency in Kazakhstan
Position	Airline's operator (agent)
Description	Working out the optimal routes, space reservation, ticketing

Date: from to	October 1995 October 1996
Location	Kazakhstan
Client	Kazakhstan Union of International Road Carriers (KazATO)
Position	The TIR Department Director
Description	Relations with the IRU, Kazakh Customs and national authorities, contacts with Kazakh Road Transport Operators, instructions elaboration, introduction of new rules and circulation

Date: from to	October 1994 November 1995
Location	Kazakhstan
Client	Ministry of Transport and Communications
Position	Foreign economic relations Department, chief specialist
Description	Incoming correspondence from any countries, preparation of intergovernmental and national papers, legal acts, endorsement the papers on national transport in other bodies.

14. **Others:**

FIATA Training courses with Certificate confirming.

Publications: magazine's articles

CURRICULUM VITAE

Proposed position in the programme: **LEGAL EXPERT**

1. **Family name:** Ivanov
2. **First name:** Alexei
3. **Date of birth:** 12 February 1978
4. **Nationality:** Kazakhstan
5. **Civil status:** unmarried
6. **Education:**

Institution	Kazakh State University of Law
Date: From To	September 1995 July 1999
Degree or Diploma obtained:	Diploma

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
English	5	5	4
Kazakh	4	3	3

8. **Membership of professional bodies:**

No

9. **Other skills:**

Extensive work experience with MS Office programs, PhotoShop, E-mail, office equipment, etc

10. **Present position:**

JSC "Research Institute for Transport", lawyer

11. **Years within the firm:**

since 1999 with the Institute

12. **Key qualifications:**

Legal expert specialized in civil (commerce) law, freight forwarding and transport problems

13. **Professional Experience Record:**

Date: From To	1999 Ongoing
Location	Kazakhstan
Client	JSC Research Institute for Transport
Position	Lawyer
Description	Elaboration legal act concerning freight forwarding, combined carriages, sea and road transport. Investigation of the customs legislation of the Republic of Kazakhstan

Date: From To	February 1999 March 1999
Location	Kazakhstan
Client	Branch of the Canadian Law Firm Macleod Dixon in Kazakhstan
Position	Lawyer assistant
Description	Preparing memorandum for a few matters (taxation, telecommunications, etc.)

Date: From To	1997
Location	Kazakhstan
Client	Regional Representative office of Scott Wilson Kirkpatrick in Almaty
Position	Office assistant
Description	Assisted the office staff with the running of a busy office: faxing, filing, sending and receiving E-mails

CURRICULUM VITAE

Proposed position in the programme: **LOCAL EXPERT**

1. **Family name:** Bekmagambetova
2. **First name:** Gulnara
3. **Date of birth:** 30 November 1972
4. **Nationality:** Kazakhstan
5. **Civil status:** married
6. **Education:**

Institution	Kazakh State Academy of Management
Date: from To	September 1990 July 1994
Degree or Diploma obtained:	Diploma

Institution	Higher School of Law "Adilet"
Date: From To	1997 till now
Degree or Diploma obtained:	3-rd year student

7. **Language skills:**
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
Kazakh	5	5	5
English	4	4	4

8. **Membership of professional bodies:**

No

9. **Other skills:**

Computer: MS DOS, MS Office software

10. **Present position:**

JSC "Research Institute for Transport", Expert at the Economic and Management Department

11. Years within the firm:

since 1997 with the Institute

12. Key qualifications:

Economist

13. Specific Eastern Countries experience:

(* donates experience in conducting training for nationals of the respective country)

Country	Date: from - to

14. Professional Experience Record:

Date: From To	1997 Till now
Location	Kazakhstan
Client	JSC Research Institute for Transport
Position	Expert
Description	Involvement in international projects: 1997 – 1998 USAID Stock Market Development Project, PRAGMA Corporation, share registration consultant

Date: From To	1994 1997
Location	Kazakhstan
Client	JSC Research Institute for Transport
Position	Junior Expert
Description	Involvement in international projects: 1995 – 1997 USAID Mass Privatization Project, Chemonics Int., share registration consultant; 1994 – 1995 USAID Mass Privatization Project, Ernst & Young, share registration consultant

CURRICULUM VITAE

Proposed position in the programme: **LOCAL EXPERT**

1. **Family name:** Aldabergenov
2. **First name:** Bolat
3. **Date of birth:** 23 September 1946
4. **Nationality:** Kazakhstan
5. **Civil status:** married
6. **Education:**

Institution	Ust-Kamenogorsk Road Transport Institute
Date: From To	September 1971 July 1977
Degree or Diploma obtained:	Diploma

Institution	Moscow Road Transport Institute, Post Graduate Courses
Date: From To	1987 1991
Degree or Diploma obtained:	Ph.D. in Transport

7. **Language skills:**
(5= excellent - 1= very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
Kazakh	4	4	4
English	3	3	2

8. **Membership of professional bodies:**

No

9. **Other skills:**

User level computer literate.

10. **Present position:**

Senior Expert of a JSC "Research Institute for Transport",
Consultant of a Private company "Consult LTD".

11. Years within the firm:

Since 1971 with the Institute
 Since 1995 with a private company

12. Key qualifications:

Engineer, specialized in transport, legislation, transport sector reforming and privatization.
 Participated in different projects on road transport reforming and privatization.

Specific Eastern Countries experience:
 (* donates experience in conducting training for nationals of the respective country)

13. Professional Experience Record:

Date:	From To	1995 Till now
Location	Kazakhstan	
Client	JSC "Research Institute for Transport"	
Position	Senior Expert	
Description	Involvement in international projects: WBRD: Upgrading of Management for urban passenger transport (in 3 cities), Louis Berger;	

Date:	From To	1993 1995
Location	Kazakhstan	
Client	Privatization of Freight Road Transport in Kazakhstan USAID: Ernst & Young, Booz Allen & Hamilton, Carana	
Position	Consultant	
Description		

Date:	From To	1989 1993
Location	Kazakhstan	
Client	"KazAvtoTransTechnica" Scientific-Industrial Association	
Position	Engineer, Junior Expert and Expert of the Freight Transport Department	
Description		

Date:	From To	1978 1989
Location	Kazakhstan	
Client	Kazakh Research and Design Institute for Road Transport	
Position	Engineer, Junior Expert of the Freight Transport Department	
Description		

Others:

Publications: he has 5 publications

CURRICULUM VITAEProposed position in the program: **LOCAL EXPERT (HIGHWAY ENGINEERING)**

1. Family name: Ishenaliev
2. First name: Rustam
3. Date of birth: 24 December 1971
4. Nationality: Kyrgyz
5. Civil status: married
6. Education:

Institution	Kyrgyz Institute of Architecture and Construction
Date: from to	1993
Degree or Diploma obtained:	B.Eng. (Highway and Airfield Engineering)

Institution	Asian Institute of Technology, Bangkok
Date: from to	1998-2000
Degree or Diploma obtained:	M.Eng. (Transportation) Thesis - multicriteria evaluation of transport .projects using the Analytic Hierarchy Process and theory of fuzzy sets.

Institution	Danish Road Directorate Pavement Management Systems Courses
Date: from to	1997
Degree or Diploma obtained:	Yes

7. Language skills:
(5 = excellent - 1 = very poor)

Language	Reading	Speaking	Writing
Russian	5	5	5
English	4	4	4
Kyrgyz	5	5	5

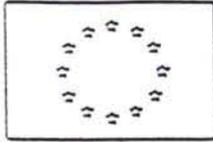
8. Membership in professional bodies: No
9. Other skills: (e.g. computer literacy, etc.)

10. Present position: Louis Berger International, Project engineer
11. Years within firm: since 2000
12. Key qualifications: Highways Engineer
Software and Pavement Management Systems Specialist
13. Professional Experience Record:

Date: from to	2000 present
Location	Kyrgyzstan
Company	Louis Berger International
Position	Project engineer
Description	Bishkek – Osh Road 3 rd Phase feasibility study

Date: from to	1993 1998
Location	Kyrgyzstan
Company	Design Institute “Kyrgyzdortransproject”
Position	Highways Engineer Software and Pavement Management Systems Specialist
Description	<p>Local co-ordinator of the TRACECA program for Tractebel Development Engineering</p> <p>Coordination of contacts between European and local officials, experts and counterparts, assistance in setting up the project activities.</p> <p>Technical translations for software manuals, technical reports</p> <ul style="list-style-type: none"> - geometric design of urban streets for Ak-Orgo district (Bishkek, Kyrgyzstan, 1993-94); - route survey, geometric and pavement design for access road to Kumtor gold mining deposit (Kyrgyzstan, 1994-95); - field data collection and survey works for Bishkek - Osh Road Rehabilitation Project including DCP, Benkleman Beam, Traffic Volume and Axle Load Surveys (Kyrgyzstan, 1996); - preparation of tender documents for consultancy services in preparing the Feasibility Study and Detailed Design for Bishkek-Torugart Road Reconstruction Project (Kyrgyzstan, 1996); - field data collection and survey works for Bishkek - Torugart Road Reconstruction Project including road roughness measurements, traffic volume and axle load surveys (Kyrgyzstan, 1997);

	<ul style="list-style-type: none">- assistance in collection and analysis of data for HDM-III model of World Bank for economic analysis of Bishkek-Torugart Road Rehabilitation Project (Kyrgyzstan, 1997);- field data collection and maintenance of "RoSy" pavement management system after implementation of PMS in Kyrgyzstan within the framework of TRACECA projects (Kyrgyzstan, 1997-1998).- Geometric design of urban streets for Ak-Orgo district (Bishkek, Kyrgyzstan, 1993-94);- Route survey, geometric and pavement design for access road to Kumtor gold mining deposit (Kyrgyzstan, 1994-95);- Field data collection and survey works for Bishkek - Osh Road Rehabilitation Project including DCP, Benkleman Beam, Traffic Volume and Axle Load Surveys (Kyrgyzstan, 1996);- Preparation of tender documents for consultancy services in preparing the Feasibility Study and Detailed Design for Bishkek-Torugart Road Reconstruction Project (Kyrgyzstan, 1996);- Field data collection and survey works for Bishkek - Torugart Road Reconstruction Project including road roughness measurements, traffic volume and axle load surveys (Kyrgyzstan, 1997);- Assistance in collection and analysis of data for HDM-III model of World Bank for economic analysis of Bishkek-Torugart Road Rehabilitation Project (Kyrgyzstan, 1997);- field data collection and maintenance of "RoSy" pavement management system after implementation of PMS in Kyrgyzstan within the framework of TRACECA projects (Kyrgyzstan, 1997-1998).
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EUROPEAN COMMISSION

Joint Relex Service for the Management of Community Aid
to Non - Member Countries (SCR)

Directorate E - Invitations to Tender, Contracts and Legal Matters

ANNEX E

General Conditions for Service Contracts financed from Phare/Tacis Funds

Version 1/1997
modified 1/1999 (ECU = EUR)

This text is also available in French and German.
E-mail Tacis.pu@tacis-pu.com



**PROJECT: CENTRAL ASIAN BORDER CROSSINGS
SCR-R/110622/C/SV/WW**

STATEMENT OF SUBCONTRACTING / CO-OPERATION

I, LUC VERHEYE, director of Computer Solutions BV, declare on behalf of the Company the following:

- ♦ Computer Solutions will work together with The Kazakh "Research Institute for Transport" (NIIT) for the performance of the services as requested in the ToR for Module A. The details of the co-operation have to be discussed at the start of the project;
- ♦ Computer Solutions will hire two serving EU customs officers (via the company eDOUcation) as recommended by the ToR. The CV of these officers is included.

Signed
Computer Solutions BV

Luc Verheye
Director.

A handwritten signature in blue ink, appearing to read "Luc Verheye", is written over a blue horizontal line.

Профиль Компании

Название и адрес	: Tractebel Development Engineering S.A. avenue Ariane 7 B-1200 Brussels BELGIUM Тел. : +32 2 77375.11 Телекс: 21.852 TRACT b Факс : +32 2 773.79.90
Юридический Статус	: Частная компания с ограниченной ответственностью (по Бельгийскому законодательству "Société Anonyme (S.A.)")
Регистрационный номер	: Торговый реестр Брюсселя : 442.519
Дата образования	: 1982 г.
Акционерный Капитал	: эквивалентен 2,75 млн долларов США
Годовой оборот	: эквивалентен 34,3 млн долларов США (в среднем)
Акционер	: Группа "TRACTEBEL ENGINEERING" - объединение: <ul style="list-style-type: none">• TRACTIONEL S.A, (Бельгия) образованной в 1895 г. , и• ELECTROBEL S.A, (Бельгия) образованной в 1929 г.
Управляющий Директор	: Жорж Оже - Инженер по гражданскому строительству
Штат	: более 250 инженеров, экономистов, финансовых аналитиков, специалистов по окружающей среде и организационным вопросам, специалистов по закупкам, геотехников и т. д.

TRACTEBEL DEVELOPMENT - та часть TRACTEBEL Engineering, которая в основном специализируется в области развития инфраструктуры и в частности в секторе транспорта.

TRACTEBEL Engineering

Оборотный капитал: эквивалентен 434 млн долларов США
Штат: более 3000 инженеров-строителей, экономистов, геотехников, экспертов по закупкам, финансовых аналитиков, специалистов по окружающей среде, по управленческим и организационным вопросам и т. д.

Общая характеристика

TRACTEBEL DEVELOPMENT ENGINEERING является предприятием компании **TRACTEBEL ENGINEERING**, специализирующейся в области развития инфраструктуры в целом и в транспортного сектора в частности. В штат входят большое количество специалистов, охватывающих практически все аспекты транспортного сектора т. е. инженеры - строители, дорожные инженеры, железнодорожные инженеры, специалисты по железнодорожной сигнализации, электротехники, эксперты по транспортной экономике и планированию транспорта, финансовые аналитики, геологи, геотехники, руководители проектов, архитекторы, компьютерные эксперты, топографы и т. д. Кроме того, в случае необходимости, эти специалисты транспортна имеют доступ к экспертам, находящимся в других специализированных предприятиях в структуре **TRACTEBEL ENGINEERING**:

- **IMDC**: дноуглубительные работы, речное строительство, гидравлика
- **TECHNUM**: планирование и строительство портов
- **COYNE ET BELLIER**: туннели, специализированные конструкции
- **TRACTEBEL CONSULT**: управление, консультантские услуги, организация, исследования рынка
- **TRASYS**: компьютерные системы.
- **TRACTEBEL INDUSTRIES**: логистика, оборудование по обработке

Благодаря такой организации, **TRACTEBEL DEVELOPMENT ENGINEERING** имеет возможность быстро составить группы multidisciplinary специалистов из разных областей транспортного сектора, которые уже работали вместе в международной обстановке.



Деятельности

- **Железные дороги, массовый транспорт**

Высокоскоростные поезда, Легкий Железнодорожный Транспорт, метро, полное проектирование систем, инфраструктуры, суперструктуры, подвижный состав, снабжение электроэнергией, сигнализация, мониторинг, безопасность, стратегия для развития, анализ затрат и прибыли, финансовый анализ, укрепление управленческой и институциональной базы, приватизация, управление проектами, наблюдение за строительными работами, анализ проявленного предпочтения

- **Городской транспорт**

Планирование городского транспорта, аудит автобусных компаний, транспортная технология, планирование, укрепление институциональной базы, транспортная политика, моделирование

- **Транспортный инжиниринг**

Анализ пропускной способности, проектирование пересечений, усовершенствованная транспортная телематика, безопасность на дорогах, дорожная сигнализация, автоматизирование

- **Автомобильные Дороги**

инфраструктура шоссе и сельских автодорог, мосты, туннели, политика автомобильного транспорта, стратегия для содержания дорог, планирование внутреннего транспорта, экономическая оценка, укрепление институциональной базы, финансовая нагрузка дорожных потребителей, дорожные концессии, надзор за строительными работами

- **Порты**

Планирование портов, гидравлика, дноуглубительные работы, суперструктуры и оборудование, прибрежные и морские работы, осушка земель, экономическая оценка, финансирование портов, укрепление управленческой и институциональной базы, управление проектами, морской транспорт

- **Речной транспорт**

Планирование, гидравлика, стратегия для развития, дноуглубительные работы, шлюзы, экономическая оценка, институциональные вопросы, управление проектами, надзор за строительными работами

- **Аэропорты**

Проектирование аэровокзалов, оборудование, управление проектами, надзор за работами

- **Гео-технология**

Исследование и контроль материалов, природные риски, гидрогеология, геология, геотехника

- **Окружающая среда**

Шум, загрязнение воздуха, вибрация, влияния транспорта на окружающую среду, оценка воздействия на окружающую среду

- **Услуги поддержки**

Картография, Система Географической Информации (G.I.S), Автоматизированное проектирование (Computer Assisted Design), Автоматизированное моделирование

TRACTEBEL Development обладает организацией и нужными финансовыми средствами для крупных проектов, а также для мелких поручений и консультантских услуг.

Техническая оснащенность



- ◆ Персональные компьютеры (486 и Pentium) для каждого служащего, взаимосвязанные через сеть Novell
- ◆ Рабочие станции HP-UX
- ◆ Внутренняя система электронной почты с прямым выходом в Интернет
- ◆ Все стандартное программное обеспечение (Word, WordPerfect, Excel, Lotus, Access, Power Point, ...)
- ◆ Высококачественные лазерные принтеры (цветные)
- ◆ Высококачественные сканеры и CD устройства



- ◆ Система CAD Проектирования с Помощью Компьютеров (Autocad, Star-CAD Microstation, т.д.)
- ◆ Система картографии и нанесения на карты (STAR Carto)
- ◆ Системы GIS (Map-Info, STAR GIS, etc.)
- ◆ Высококачественные плоттеры больших размеров (HP Designjet)



- ◆ Крупные и полностью компьютеризованные Технические Информационные Центры, расположенные в помещении
- ◆ Сложные средства исследования документов (внутренние, внешние)
- ◆ Прямые соединения с другими техническими информационными центрами (в Бельгии и за пределами)



- ◆ Международная сеть внешних высокоспециализированных экспертов
- ◆ Полностью компьютеризованная база данных международных специалистов работающих не по найму



- ◆ Специализированные компьютерные программы по инжинирингу автомобильных дорог, инжиниринга железных дорог, инжинирингу движения, планированию транспорта, копирующие модели городского и междугороднего транспорта, экономическим оценкам, финансовым анализам и т.д.
- ◆ Специализированное программное обеспечение и оборудование по геологии и геотехнике
- ◆ Специализированное программное обеспечение по статистике, анализу постоянных привилегий, анализу риска, математике, моделированию Монте-Карло, управлению базой данных, etc.



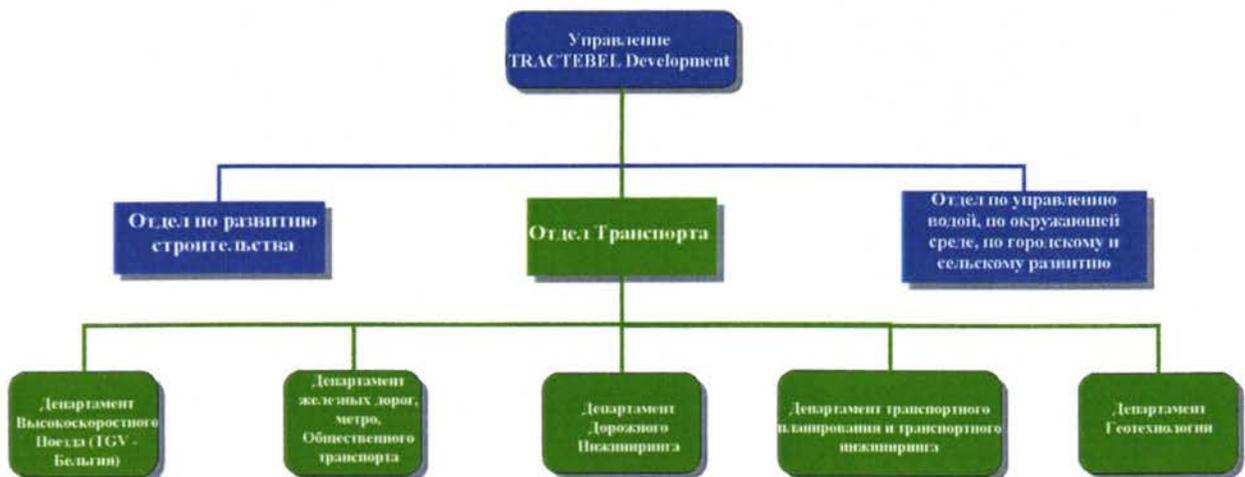
- ◆ Полностью оборудованный центр репродукции, имеющий :
 - ⇒ 3 высокоскоростные копировальные машины (100 копий / минуту)
 - ⇒ 2 высококачественные цветные копировальные машины, соединенные с компьютерной сетью
 - ⇒ 1 цветную копировальную машину с фотокачеством (технология сублимации)
 - ⇒ 2 настольные издательские рабочие станции
 - ⇒ 3 машины Офсет для высококачественных работ
 - ⇒ оборудование для воспроизводства планов

Персонал

Инженеры (гражданское строительство, механическое машиностроение, т.д..)	200
Экономисты	5
Финансовые аналитики	4
Магистры Администрирования Бизнеса	3
Специалисты по окружающей среде	5
Ученые в области компьютеров	3
Агрономы	2
Геологи	3
Геотехники	3
Доктора	2
Социолог	1
Чертежники	36
Персонал поддержки	33
	<hr/>
Всего :	300



Организационная структура



Офисы за границей и филиалы

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Телефакс : + 84 4 821 24 39 - 821 00 20

Регистрация в Международных Организациях

- ◇ Фонд Абу-Даби по Арабскому Экономическому Развитию (A.D.F.A.E.D.)
- ◇ Африканский Банк Развития (A.F.D.B.)
- ◇ Арабский Банк Экономического Развития в Африке (A.B.E.D.A.)
- ◇ Арабский Фонд Экономического и Социального Развития
- ◇ Азиатский Банк Развития (A.D.B.)
- ◇ Комиссия Европейских Сообществ (E.C.)
- ◇ Комиссия Европейских Сообществ, фонды PHARE и ТАСИС
- ◇ Европейский Фонд Развития (E.D.F.)
- ◇ Европейский Инвестиционный Банк (E.I.B.)
- ◇ Европейский Банк Реконструкции и Развития (E.B.R.D.)
- ◇ Продовольственная и Сельскохозяйственная Организация (F.A.O.)
- ◇ Интерамериканский Банк Развития (I.D.B.)
- ◇ Международный Фонд Развития Сельского Хозяйства (I.A.D.F.)
- ◇ Международная Ассоциация Развития (I.D.A.)
- ◇ Международная Финансовая Корпорация (I.F.C.)
- ◇ Международный Офис Труда (I.L.O.)
- ◇ Исламский Банк Развития (I.S.D.B.)
- ◇ Кувейтский Фонд Арабского Экономического Развития
- ◇ Организация по Экономическому Сотрудничеству и Развитию (O.E.C.D.)
- ◇ Саудовский Фонд Развития
- ◇ Программа Развития Организации Объединенных Наций (U.N.D.P.)
- ◇ Организация Промышленного Развития Организации Объединенных Наций (U.N.I.D.O.)
- ◇ Организация объединенных Наций (U.N.O.)
- ◇ Западно-Африканский Банк Развития (W.A.D.B.)
- ◇ Мировой Банк (I.B.R.D.)
- ◇ Всемирная Организация Здравоохранения (W.H.O.)

Selected References in Road Planning

Project	Mission	Country	Period	Financing
Development of the 6,000 km long Transport Corridor Europe - Caucasus - Central Asia (TRACECA).	Project management for the implementation of the TRACECA programme, including: identification and preparation of transport projects in the corridor; development of a regional multimodal transport simulation model; restructuring of railways; railways infrastructure maintenance; road pavement management systems; road maintenance programmes; feasibility studies of port terminals; development of the road freight industry; institutional strengthening, training; transport legal and regulatory framework, etc.	10 TACIS countries	1995-now	TACIS Fund
Preparation of a multimodal Transport Master Plan for the Province of Siem Reap.	Forecasts of the transport demand, preparation of a multimodal transport simulation model, identification and appraisal of projects (road, port, waterways, urban and air sub-sectors), investment programme and financing, institutional and environmental aspects.	Cambodia	1997	European Commission
Reorganisation of the road maintenance system in Mauritania.	Technical Assistance for the reorganisation of the road maintenance system. Supervision and evaluation of the implementation of a national road maintenance agency.	Mauritania	1995-1996	European Development Fund (EDF)
Reorganisation of the National Civil Works Laboratory in Cameroon within the context of privatisation	Technical assistance for the restructuring and the privatisation of the Laboratory.	Cameroon	1995	European Development Fund (DG8)
Creation of a new engineering office for road maintenance in Zaire (now Congo).	Technical and financial feasibility study, setting up of the organisation and management system.	Zaire	1990/1991	World Bank
Preparation of projects to be financed by the Cohesion Fund in the field of Environment.	Framework contract for the provision of technical assistance for the identification and preparation of projects to be financed by the Cohesion Fund in the field of Environment.	Greece/Ireland/Portugal/Spain	1995-1997	Cohesion Fund
Preparation of projects financed by the Cohesion Fund in the transport sector.	Framework contract for the provision of technical assistance for the identification and preparation of projects co-financed by the Cohesion Fund in the transport sector.	Greece/Ireland/Portugal/Spain	1997	Cohesion Fund
Reconstruction of the Bertoua - Garoua - Boulai road.	Realisation of a full Environmental Impact Assessment.	Cameroon	1996	
Reorganisation of the National System for Road Maintenance in Mauritania.	Technical Assistance for the day to day management of a road maintenance company.	Mauritania	1994-1998	EDF
Preparation of a Road Maintenance Programme.	Setting-up of a periodical maintenance project for asphalt coated roads (RNI -RN4-RNS-RN7-RN9-RN14); preparation of a maintenance and repair programme of about 1,050 km of asphalt roads.	Burkina Faso	1993-1994	

Project	Mission	Country	Period	Financing
Simulation of the impact of infrastructure projects, changes in tariff policy, legislation, economic development, etc. on the freight transport flows.	Development of a multimodal multiproducts transport simulation model. Training.	Belgium	1996-1997	Client
Rail/ Road Combined Transport product design within the framework of its strategic development in Europe.	Management Marketing, Quality.	Europe	1993-1994	Client
Multimodal freight transport platform including an airport, rail and road terminals, logistics and industrial areas.	Strategy, Market and Feasibility study.	France	1995	Client
Development of a short term goods traffic forecasting system by road, rail, inland waterways within the European Union.	Planning, Modelling.	Europe	1983-1984	EEC
Development of the Brussels-Luxembourg-Strasbourg transport corridor.	Economic and financial feasibility study of various transport infrastructure and equipment projects required to improve transport efficiency in the corridor (rail, road, air).	Belgium, France, Luxembourg	1981-1982	EC
Development of a national road maintenance programme.	Study of road maintenance programmes and analysis of the organisational and interfacing aspects between organisations, suppliers and clients.	Zaire	1991	World Bank
Diagnosis and rehabilitation plan of two departments : Maintenance and Supply and Human Resources.		Zaire	1987	World Bank
Preparation of a national road development plan.	Traffic forecasts, traffic surveys, project identification, feasibility studies of road projects, cost-benefit analysis, training, institutional strengthening, road maintenance plan, programme financing.	Guinea	1985	World Bank
Institutional strengthening of the Road Office.	Preparation of a strategic development plan for the road sector; organisation and management audit of the Road Office.	Zaire	1984	
Development of the inland waterways in the Amazon Basin in order to constitute an intermodal network in connection with the other means of transport.	Traffic forecasts, analysis of competition between modes; project identification; pre-feasibility and feasibility studies of proposed projects; environmental impact assessment; development plan; project financing.	Bolivia	1995-1996	Belgian Co-operation Administration
Extension of the international road transport (TIR) storage centre in Brussels.	Market study.	Belgium	1995-1996	Client

Project	Mission	Country	Period	Financing
Multimodal freight transport platform.	Strategy, market and feasibility study, including an airport, a road and a rail terminal as well as logistics and industrial areas.	France	1995	Client
Reconstruction of the Lualaba bridge, linking Lubumbashi to Kolwezi.	Technical and economic evaluation of the project.	Zaire	1993	World Bank
Improvement of the road Sahr-Moundou-Léré and M'Baikoro-Goré.	Cost estimate of works and programming of the annual maintenance expenditures for 15 years.	Tchad	Since 1997	European Development Fund (EDF)
Road maintenance programme of the tertiary road network.	Study on the tertiary roads of rural areas to define basis of an optimal maintenance policy.	Burkina Faso	Since 1997	World Bank
Maintenance of the Sikasso-Koutiala road, rehabilitation of the 245 km long Koutiala-Sienso road.	Economic feasibility study, technical study of the execution project, preparation of the calls for tender, organisation of work control and supervision.	Mali	Since 1996	World Bank
Rehabilitaion programme of rural and regional roads.	Technical assistance to the National Directorate of Rural Engineering for the elaboration of calls for tenders for rehabilitation works of rural and regional roads; institutional support to the decentralized structures.	Guinea	1991 - 1996	World Bank
Rehabilitation of Liptako-N'Gourma road.	Technical and economic feasibility study; detailed engineering studies of works execution; preparation of calls for tenders.	Niger	Since 1995	Belgian Co-operation
Periodic maintenance programme of asphalted roads (1.200 km).	Preliminary technical study, economic and technical study of execution and establishment of the calls for tenders.	Burkina Faso	1993 - 1995	European Development Fund (EDF)
Follow-up and transfer of road infrastructure markets.	Technical assistance.	D.R.C.	1993	World Bank
Road signalling programme in Bangui and on the priority interurban network.	Entire study of signalling.	C.A.R.	1992 - 1993	African Development Bank (ADB)
Maintenance and rehabilitation of the interurban road network.	Investment plan.	Haiti	1991	World Bank
Computerized system for the budgeting follow-up of road investments.	Road works programming.	D.R.C.	1991	World Bank
Evaluation of road projects financed by the European Development Fund.	Realisation of ex-post evaluation and appraisals of road infrastructure projects.	Senegal	1990 - 1991	European Development Fund (EDF)

Project	Mission	Country	Period	Financing
Development of the international corridors of Burkina Faso and Niger.	Proposal of reforms to reduce the physical constraints of infrastructure and equipment.	Burkina Faso - Niger	1990 - 1991	World Bank
Third Road Project; Rehabilitation and road maintenance.	Maintenance and repair of the road network - Technical assistance and financing management - in association with LBII.	Guinea	1985 - 1991	World Bank
Prefeasibility study of 10 road sections.	Preliminary studies to determine the economic feasibility of the chosen sections.	Niger	1990	PNUD / World Bank
Rehabilitation of the primary and secondary road network linking Matadi and Kikwit.	Feasibility study.	D.R.C.	1990	European Development Fund (EDF)
National Priority Road Programme in Congo (58.500 km long network).	Elaboration of a road programme at medium term; establishment of a maintenance policy; adaptation of the organisation structure of the Road Project Office; definitions of the interventions; realisation of an economic analysis.	D.R.C.	1989 - 1990	World Bank
Road Triangle of Goma-Walikale-Bukavu.	Feasibility study.	D.R.C.	1990	World Bank
Rehabilitation of the N'Sélé-Mosango road (420 km) and the by-pass road of Kinshasa (12 km).	Feasibility study and project design of the project.	D.R.C.	1987 - 1990	World Bank
Institutional strengthening of the General Services and Human Resources Departments of the Road Projects Office.	Organisation study; definition of the structures and most adapted directions for functioning for the different divisions.	D.R.C.	1987	World Bank
Rehabilitation of the 255 km long Kinshasa-Matadi road.	Preparation of a full technical and economic feasibility study of the project. Preparation of preliminary and final design of the project.	D.R.C.	1986 - 1987	World Bank
Preparation and implementation of an integrated rural development plan for the region of Tarija (6000 sqkm, 23000 inhabitants).	Identification, prioritisation and preparation of : rural roads projects, rural engineering, water supply, irrigation, agricultural development and financing, crop marketing, rural electrification, environment protection. As for the transport sector, the mission included the identification, construction design, analysis, appraisal and programming of numerous rural roads projects.	Bolivia	1995 - 1997	Client
Pavement strengthening on the Road Corridor I, section Gdansk - Jazowa.	Evaluation of the project documents prepared by the Polish authorities to receive ISPA funds : analysis of technical components, evaluation of feasibility studies realized, analysis of total investment costs and implementation planning.	Poland	2000	Client

Управление проектом по развитию транспортного коридора Европа - Кавказ - Центральная Азия (ТРАСЕКА)

Страна	Годы	Клиент	Финансирование	Стоимость
10 стран	1995 - 1998	Европейская Комиссия	ТАСИС	150 чел.-мес.

ПРОЕКТ

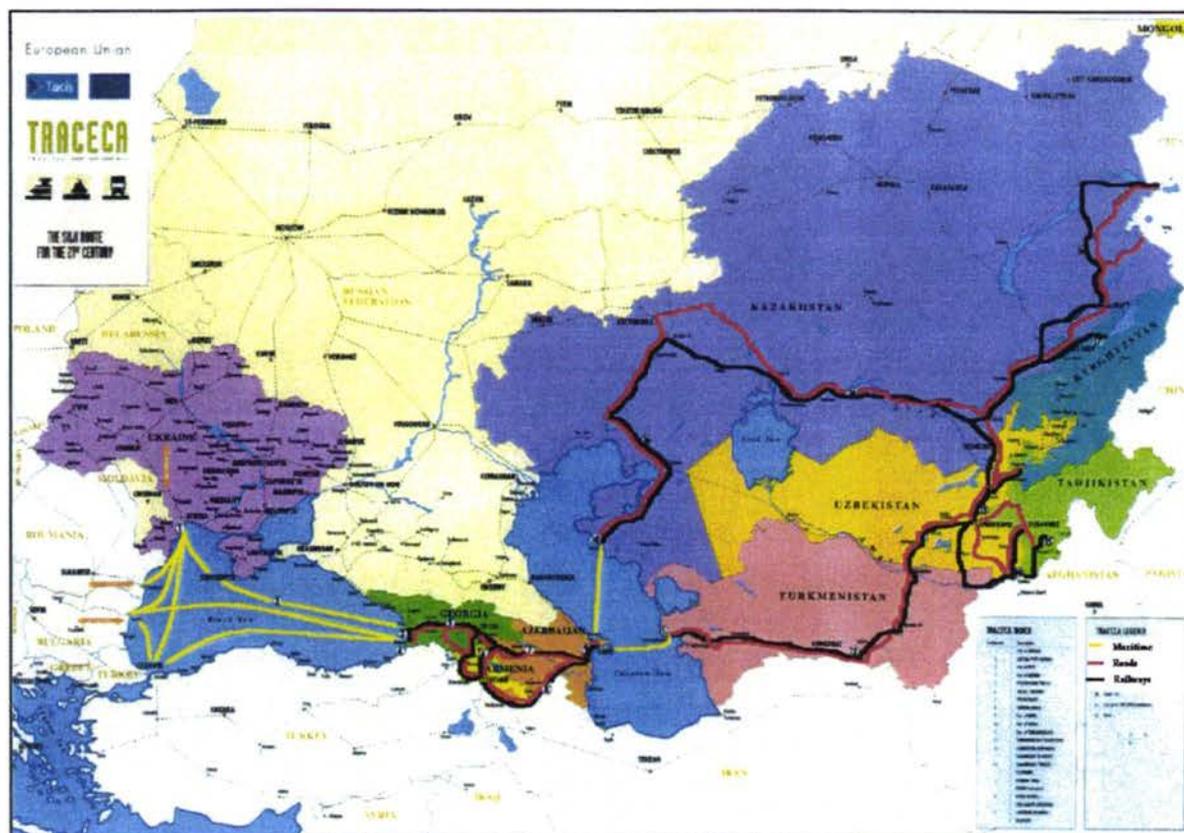
ТРАСЕКА является крупным транспортным коридором ('Шелковый путь'), который связывает Центральную Азию, Дальний Восток и ЕС через Кавказ. В проект вовлечены 10 стран (Армения, Азербайджан, Грузия, Казахстан, Кыргызстан, Таджикистан, Туркменистан, Узбекистан, Украина и Монголия). Этот коридор с протяженностью приблизительно 6 000 км включает более 10 000 км железнодорожных путей, 12 000 км автомобильных дорог и 10 морских портов. Целью программы является повышение транспортной организации и соединение с Транс-Европейскими Сетями (TEN).

МИССИЯ

TRACTEBEL DEVELOPMENT заведует управлением проектом этой амбициозной программы. Была составлена мультидисциплинарная группа

специалистов, охватывающих автодорожные, железнодорожные и портовые подсекторы, международный и морской транспорт, объединенный транспорт, международную торговлю и т.д. Эта группа работает в тесном сотрудничестве с местными координаторами во всех вовлеченных странах. Запускались проекты, такие как:

- модель прогнозирования региональных перевозок;
- реструктуризация железных дорог;
- содержание инфраструктуры железных дорог;
- системы управления дорожным покрытием;
- содержание автомобильных дорог;
- технико-экономические обоснования портовых терминалов;
- содействие индустрии автоперевозчиков;
- институциональное укрепление, профессиональная подготовка;
- законодательная и регулирующая структура транспорта, и т.д.



Мастер-план для Транспорта в Камбоджи

СТРАНА Камбоджа	ГОД 1997	КЛИЕНТ Европейская Комиссия	ФИНАНСИРОВАНИЕ Клиент	СТОИМ. 500 000 ЭКЮ
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ПРОЕКТ

Целью проекта явилось существенное улучшение транспортных условий в провинции Сиём Реап в Камбоджи. Проект включал секторы автомобильного, воздушного, портового и речного транспорта. Провинция Сиём Реап была определена как полюс основного экономического развития в стране. Известный комплекс храмов Ангкор, «одна из крупнейших археологических раскопок и туристических достопримечательностей, в мире» создает огромный потенциал для туризма, что было полностью принято во внимание в проекте. Кроме того, большое озеро (Тонле Сап), используемый для речного транспорта в Пномпень, рыболовства и туризма, является уникальным феноменом: перегрузка паводковыми водами вызывает огромный и быстрый подъем (от 8 до 13 м) уровня и площади озера. Это очень затрудняет строительство постоянного порта и посадочных сооружений.

МИССИЯ

Миссия состоялась в подготовке общего мастер-плана для транспорта провинции. Этот план должен был определить и предложить действия, инвестиционные проекты и меры по укреплению институциональной базы для усовершенствования существующей ситуации в подсекторах автомобильного транспорта, аэропорта, порта и речного транспорта. Аспекты финансирования и возмещения издержек производства, содержания инфраструктуры также являлись основными частями миссии.

Для успешного осуществления миссии TRACTEBEL Development создала многодисциплинную группу из 12 специалистов, охватывающую следующую экспертизу: планирование транспорта, планирование использования земли, развитие туризма, автомобильное машиностроение, гидравлическое машиностроение, агроэкономика, планирование окружающей среды, моделирование транспорта, анализ почвы, GIS (Географическая Информационная Система), архитектура и наследие, планирование внутреннего водного транспорта и порта.



Проектирование продукта комбинированного транспорта

Страна	Год	Клиент	Финансирование	Стоимость
Европа	1993 - 1994	Сообщество Европейских Железных Дорог и Международный Союз Железных Дорог	Клиент	15 чел.-мес.

ПРОЕКТ

Проект состоялся в развитии мультимодального транспорта, основанного на спаривании автодорожного и железнодорожного транспорта - самая популярная форма комбинированного транспорта на европейском континенте. Несмотря на меняющийся мир железнодорожного транспорта на европейском континенте, предложение международного комбинированного транспорта (ICT) останется конечным результатом сотрудничества между разными железнодорожными компаниями.

Международный союз железных дорог (UIC) и Сообщество европейских железных дорог очень хотят содействовать определению совместных критериев для развития ряда продуктов комбинированного транспорта под руководством спроса по всей Европе.

МИССИЯ

Были проведены исследования по всей Европе, с комиссией принимателей решений для того, чтобы определить нынешние и будущие требования по международному наземному транспорту.

Также измерили их уровень удовлетворения по отношению с предыдущим масштабам технических, логистических и коммерческих критериев.

Статистический анализ привел к определению критериев для удовлетворения приоритетов и к их соответствующим ценностям. На этой основе определили разные ярлыки качества для ICT и подробно описали их условия для осуществления.

Эти ярлыки качества могут стать исходной основой для определения предложения среди железнодорожных партнеров и, более обширно, среди операторов комбинированного транспорта.



Мастер-План для Внутреннего Транспорта в Гвинее

СТРАНА	ГОД	КЛИЕНТ	ФИНАНСИРОВАНИЕ	СТОИМ.
Гвинея	1985 - 1986	Министерство Транспорта	Мировой Банк	18 человеко-месяцев

ПРОЕКТ

Проект состоялся в подготовке краткосрочного и среднесрочного мастер-плана для внутреннего транспорта. План включал подсекторы автомобильного, железнодорожного, воздушного и речного транспорта.

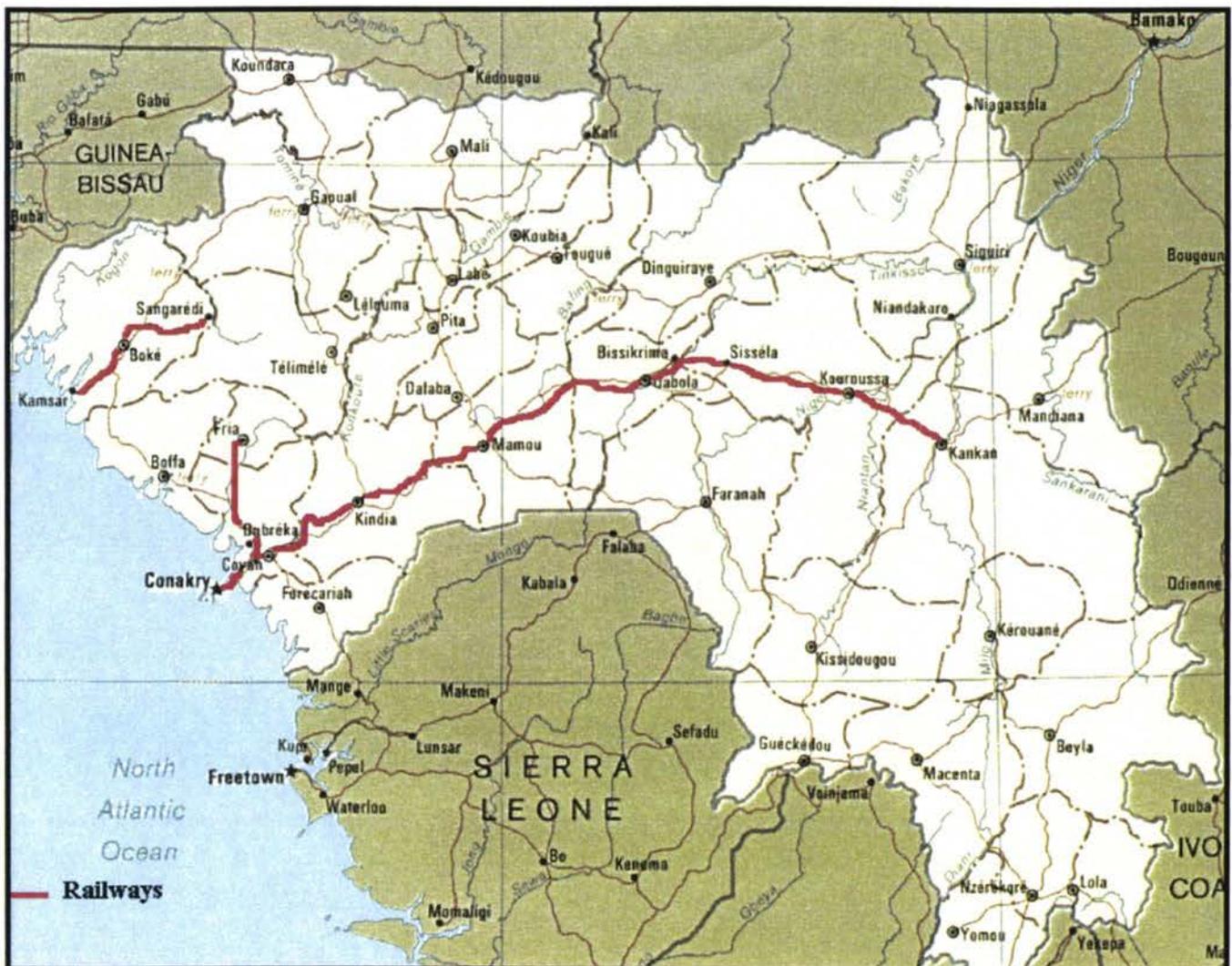
МИССИЯ

Tractebel Development заведовал подготовкой общего плана для развития транспорта.

Основные задачи включали:

- Подсчет интенсивности движения и обследования по требованию;

- Анализ физического состояния инфраструктуры транспорта (автомобильные дороги, железные дороги, аэропорты, реки)
- Подготовку общей базы данных транспорта;
- Прогнозы движения в различных экономических сценариях;
- Социо-экономический анализ и классификацию проектов;
- Рекомендации: инвестиции, реформы транспортной политики, укрепление институциональной базы, возмещение издержек, финансирование проекта, действия и меры и т.д.



Технико-экономическое обоснование для Северной Кольцевой Дороги Лима - Кальяо

Страна	Год	Клиент	Финансирование	Стоимость
Перу	1997	Министерство Транспорта и Связей	Мировой Банк	6 чел.-мес.

ПРОЕКТ

Проект состоялся в строительстве новой кольцевой дороги с протяженностью 27 км, связывая не только западные и восточные округа Лимы и Кальяо, но и крупные транспортные инфраструктуры: порт Кальяо, аэропорт и северные, центральные и южные панамериканские шоссе дороги.

МИССИЯ

Для ревизии базы данных по спросу, которая была составлена Tractebel в 1988-1989 гг., были проведены транспортные исследования, подсчеты

интенсивности движения, также как и собеседования с людьми дома и на предприятиях.

Была использована техника - Stated Preference - для оценки интереса и готовности потенциальных потребителей этого проекта.

Отклоненный и порожденный спрос, который был оценен, служил подачей информации для транспортной модели, обновленной версии той модели осуществленной в 1988 г.

Во время исследования также разработали Систему Географической Информации (GIS), включая интерфейс с транспортными моделями.



Мастер-План для Внутренних Водных Путей в боливийском Бассейне Амазонки

СТРАНА	ГОД	КЛИЕНТ	ФИНАНСИРОВАНИЕ	СТОИМ.
Боливия	1995 - 1996	Министерство Финансов	AGCD	600 000 долл. США

ПРОЕКТ

Боливийская часть Амазонки охватывает 700 000 км² и включает более 7 000 км внутренних водных путей.

Целью миссии была разработка Мастер-Плана для эксплуатации и развития водных путей в бассейне Амазонки с тем, чтобы основать интермодальную сеть совместно с другими средствами транспорта как для национальных, так и для международных перевозок.

МИССИЯ

Миссия рассматривала следующие аспекты:

- Диагностику всех вовлеченных видов транспорта: автомобильный, железнодорожный, воздушный, внутренние водные пути, мультимодальный;
- Социо-экономический анализ бассейна: производство, рынки, торговые каналы;
- Анализ спроса на транспорт, включая проекты регионального экономического развития;
- Определение инвестиционных проектов;
- Исследование воздействия на окружающую среду;
- Социо-экономическую оценку;
- Институциональное развитие;
- Анализ финансовых альтернатив



Цельная программа для сельского развития в Боливии Проекты Сельских Автомобильных Дорог

СТРАНА	ГОД	КЛИЕНТ	ФИНАНСИРОВАНИЕ	СТОИМОСТЬ.
Боливия	1995 - 1997	Европейская Комиссия	Клиент	960 чел.-мес.

ПРОЕКТ

Регион Тариха, площадь которого составляет 6000 км², а население 23000 жителей, представляет важные потенциалы развития, но отсутствие транспортной инфраструктуры, среди прочих факторов, является основным препятствием сельскому развитию. Целью программы является подготовка и осуществление плана интегрированного развития сельской местности для всего региона. Для этой цели был учрежден полу-общественный орган регионального развития CODETAR.

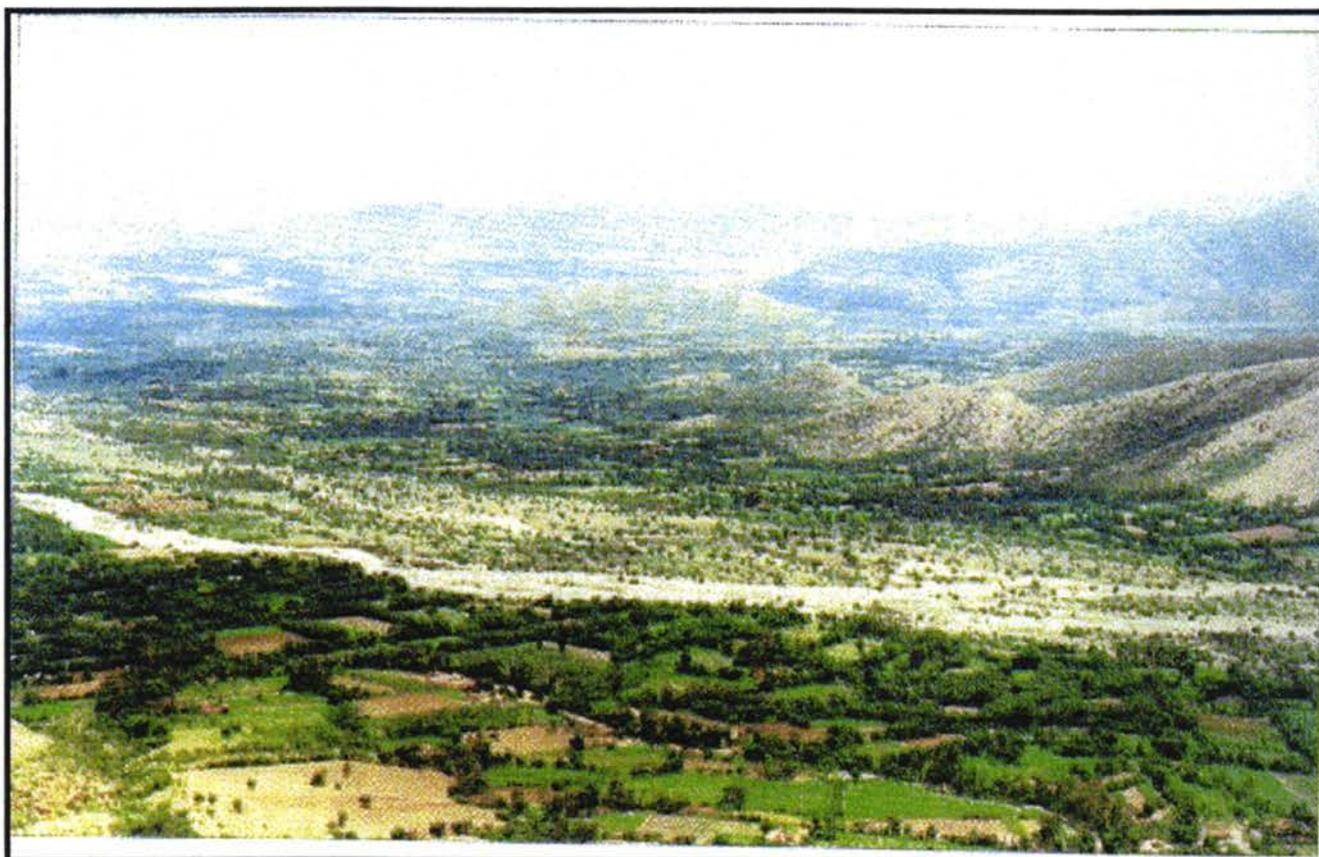
МИССИЯ

В рамках CODETAR была образована многодисциплинарная группа, состоявшая из 20 специалистов сельского развития для осуществления программы в течение 4-летнего периода.

TRACTEBEL Development в основном был вовлечен в следующие аспекты: проекты сельских автомобильных дорог, сельское строительство, водоснабжение, ирригация, сельскохозяйственное развитие и финансирование, маркетинг урожая, электрификация сельской местности, защита окружающей среды.

Что касается сектора транспорта, осуществление программы включало определение, проектирование строительства, анализ, оценку и программирование многочисленных проектов сельских автомобильных дорог

Экономическая оценка этих проектов сельских автомобильных дорог в основном базировалась на подходе излишков производителей, используя сельскохозяйственную прибыль как основную экономическую выгоду инвестиций.



Оценка воздействий нового контейнерного терминала в Зебрюгге на внутренний грузовой транспорт

Страна	Год	Клиент	Финансирование	Стоимость
Бельгия	1996	Мин.- во Фламандского Региона - Департамент окружающей среды и инфраструктуры	Клиент	1 чел. -мес.

ПРОЕКТ

Проект состоялся в строительстве нового контейнерного терминала в порту Зебрюгге. Этот новый терминал мог бы иметь огромное воздействие на его ближайшие районы.

МИССИЯ

Миссия состоялась в оценке воздействия терминала на автодорожное, железнодорожное и внутренноводное движение между морским портом Зебрюгге и его районами, и в определении мер, которые нужно предпринимать для впитывания нового движения.

Модель мультимодальных грузовых перевозок, которая была разработана консультантом до этого, была адаптирована и использована для этой цели.

Существующие матрицы с местом отправления и назначения для потоков наземных грузовых перевозок были приспособлены, и потом возложены на мультимодальную транспортную сеть, принимая во внимание три сценария для горизонтов 2000 и 2010 гг. :

- исходный сценарий (без терминала);
- сценарий с новым контейнерным терминалом без реабилитации автодорожных, железнодорожных и внутренноводных связей между морским портом и его районами;
- сценарий с новым контейнерным терминалом, и с реабилитацией некоторых автодорожных, железнодорожных и внутренноводных связей.

Благодаря этой мощной модели, стало возможно дать ответы на многие вопросы клиента, такие как:

- интенсивность нового движения на наземные транспортные сети;
- транспортная плотность на дорогах и внутренних водных путях около морского порта Зебрюгге;
- доступность к морскому порту Зебрюгге;
- узкие места причиненные или усиленные терминалом;
- воздействие движения на окружающую среду;
- меры которые нужно предпринимать для впитывания ожидаемого нового движения.

