EUROPEAN UNION - TACIS

Technical Assistance to the Southern Republics of the CIS and Georgia - TRACECA

TRADE AND TRANSPORT SECTORS

Terms of Reference

for

CENTRAL ASIAN ROAD BORDER CROSSING
And
ROAD FEASIBILITY STUDY

Final Recipient:
TRACECA Region Cabinet of Ministers,
Ministries of Transport and
Customs Authorities
CONTENTS

1. Background
   1.1. Needs of Beneficiary
   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
   2.3. Results

3. Risks and Assumptions

4. Main Components

   4.1 Module A
      4.1.1. Tasks
      4.1.2. Implementation Procedures
      4.1.3. Project Schedule

   4.2 Module B
      4.2.1 Phase 1 / Feasibility
      4.2.2 Phase 2 / Detailed Engineering and Tender Documents
      4.2.3 Implementation Procedures
      4.2.4 Project Schedule

   4.3. Global Budget

5. Reporting

6. Factors Ensuring Sustainability
   6.1. Institutional Appraisal
   6.2. Economic and Financial Appraisal
   6.3. Political Environment

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 soon-to-commence 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 co-finance 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 integrated 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 landlocked 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 Tashkent (Uzbekistan) and Osh (Kyrgyzstan). The Government of Uzbekistan now wishes to appoint consultants 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.

 raised in previous sections.

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-sopes, 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» let 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 for co-financing of the rehabilitation of the Almaty-Bishkek road and by The EBRD to TRACECA for co-financing of 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 is 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 consultant must 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 Consultant 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 have 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 co-financing of 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 diverse external users (e.g. Direct Trader Input, or DTI), 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 Tashkent-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 forecasted traffic loads into account.

For the road section agreed between EBRD and the Uzbek Government (segment of the road Tashkent-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.

Consultant 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 Consultant 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 Consultant 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 Consultant 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.

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 consultant 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 the Caucasus);
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 the Module B, local design institutes may be expected to fully partnership.

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 consultant 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 consultant 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 consultant 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 consultant 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 consultant 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 consultant 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 consultant should promote a free interchange of ideas between the countries at expert level, assist and encourage experts to make propositions, 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 consultant 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 consultant (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 consultant 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 an eventual basis for such long term strategies.

4.1.1.8 Border Crossing System Designs

The consultant 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 (e.g.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 consultant 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 automatisation

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<th>Unit of measure</th>
<th>Quantity</th>
<th>Price US$</th>
<th>Amount US$</th>
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### Table of Technical Facilities Required for Provision of Communication and Data Transmission

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<td>Breeze Link radio modems</td>
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<tr>
<td>5</td>
<td>Equipment installation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>28352.00</td>
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<tr>
<td></td>
<td><strong>TOTAL:</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>217352.00</strong></td>
</tr>
</tbody>
</table>
### Table of Training and Software Cost

#### Cost of Software Products for the Central Apparat of SCC

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Price US$</th>
<th>Total Price US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Enterprise Server for 8 licenses</td>
<td>17960</td>
<td></td>
</tr>
<tr>
<td>Tuning Pack for 8 licenses</td>
<td>1160</td>
<td>19120</td>
</tr>
<tr>
<td>Developer/2000 – 3 licenses</td>
<td>26985</td>
<td></td>
</tr>
<tr>
<td>Designer – 1 license</td>
<td>7495</td>
<td>34480</td>
</tr>
<tr>
<td>Express Analyzer – 1 license</td>
<td>865</td>
<td></td>
</tr>
<tr>
<td>Express Server – 1 license</td>
<td>5895</td>
<td>12555</td>
</tr>
<tr>
<td>Express Object – 1 license</td>
<td>5795</td>
<td></td>
</tr>
<tr>
<td>Delphy Instrumental System</td>
<td>2800</td>
<td>2800</td>
</tr>
<tr>
<td>Developer Suite (WEB) – 1 license</td>
<td>9495</td>
<td></td>
</tr>
<tr>
<td>Application Server (WEB) for 8 licenses</td>
<td>1900</td>
<td>11395</td>
</tr>
</tbody>
</table>

**Total:** 80350

#### Training Cost

<table>
<thead>
<tr>
<th>Name of Software product</th>
<th>Training Cost for 1 Specialist US$</th>
<th>Total Price US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator of ORACLE data base</td>
<td>5060</td>
<td>10120</td>
</tr>
<tr>
<td>ORACLE Application development engineer</td>
<td>4400</td>
<td>17600</td>
</tr>
<tr>
<td>Olap analyst</td>
<td>1440</td>
<td>1440</td>
</tr>
<tr>
<td>Designer 2000</td>
<td>6480</td>
<td>6480</td>
</tr>
<tr>
<td>UNIX Network Administrator</td>
<td>2900</td>
<td>5800</td>
</tr>
<tr>
<td>UNIX System Administrator</td>
<td>2900</td>
<td>2900</td>
</tr>
</tbody>
</table>

**Total:** 44340

#### Cost of Software Products for 4 ASCC, where Automatic Border Crossing Posts are situated

<table>
<thead>
<tr>
<th>Name of the Product</th>
<th>Costs US$</th>
<th>Total Price US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows NT-Server – 20 licenses</td>
<td>3000</td>
<td>3000</td>
</tr>
<tr>
<td>Informix Universal Server – 10 licenses</td>
<td>4000</td>
<td>4000</td>
</tr>
</tbody>
</table>

**Total:** 7000

#### Training Cost

<table>
<thead>
<tr>
<th>Name of a Software Product</th>
<th>Training Cost for 1 Specialist US$</th>
<th>Total Price US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator of INFORMIX Database</td>
<td>3000</td>
<td>6000</td>
</tr>
</tbody>
</table>
### Administrator of Windows NT Network

<table>
<thead>
<tr>
<th></th>
<th>2900</th>
<th>2900</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Software Product for 4 Automatic Border Crossing Posts</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of the Product</th>
<th>Cost US$</th>
<th>Total Price US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows NT-Workstation for 8 Stations</td>
<td>2400</td>
<td>2400</td>
</tr>
</tbody>
</table>

#### Total Cost Table

<table>
<thead>
<tr>
<th>Name</th>
<th>Cost in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Equipment</td>
<td>292928.00</td>
</tr>
<tr>
<td>Software</td>
<td>89750.00</td>
</tr>
<tr>
<td>Training</td>
<td>53240.00</td>
</tr>
<tr>
<td>Total</td>
<td>435918.00</td>
</tr>
</tbody>
</table>

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 consultant will propose and agree with each individual beneficiary country a procurement list for that country.

#### 4.1.1.11 Procurement

The consultant will write detailed specifications and procure the IT, telecommunications, software, enforcement equipment as determined in previous tasks. The consultant 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 consultant, 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. Consultants are encouraged to employ local experts for writing software.

4.1.12 Installation, Commissioning and Training

The consultant 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 consultants 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 consultant 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.

4.1.13 Follow-up Support

The consultant 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 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 Consultant 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 Consultant 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 consultants 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-consultants 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 Consultant 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 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 Consultant 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 requirement 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 Consultant 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 Consultant 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 Consultant 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 Consultant 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 consultant 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 Consultant 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 Consultant’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 Consultant 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 Consultant 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 Consultant will report to the Director. Written reports will be copied to the EBRD’s designated staff. The Consultant should at all times liaise closely with the responsible Ministry and the concerned local agencies.

The Consultant 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 Consultant 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 Consultant:

(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 Consultant 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 Consultant 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 Consultant 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:

<table>
<thead>
<tr>
<th>End of Month</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract signing</td>
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**Phase 1**

<table>
<thead>
<tr>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Mobilisation</td>
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</tr>
<tr>
<td>Inception Report submitted</td>
<td>1.5</td>
</tr>
<tr>
<td>Interim Progress Report submitted</td>
<td>4</td>
</tr>
<tr>
<td>Draft Feasibility Report submitted</td>
<td>7</td>
</tr>
<tr>
<td>Final Feasibility Report issued</td>
<td>9</td>
</tr>
</tbody>
</table>

**Phase 2**

<table>
<thead>
<tr>
<th>Event</th>
<th>End of Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Prequalification Documents submitted</td>
<td>9</td>
</tr>
<tr>
<td>Prequalification Documents issued</td>
<td>11</td>
</tr>
<tr>
<td>Prequalification applications returned</td>
<td>14</td>
</tr>
<tr>
<td>Draft Tender Documents submitted</td>
<td>14</td>
</tr>
<tr>
<td>Prequalification Report submitted</td>
<td>15</td>
</tr>
<tr>
<td>Final Tender Documents issued</td>
<td>16</td>
</tr>
<tr>
<td>Draft Design Report submitted</td>
<td>17</td>
</tr>
<tr>
<td>Final Design Report issued</td>
<td>19</td>
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<tr>
<td>Construction Tenders returned</td>
<td>20</td>
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<tr>
<td>Tender Evaluation Report submitted</td>
<td>21</td>
</tr>
<tr>
<td>Contract Award</td>
<td>23</td>
</tr>
</tbody>
</table>

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 consultant, the beneficiary authorities, and TACIS.

The firm commitment of TACIS to the co-financing of 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 consultant 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 consultant, 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:
<table>
<thead>
<tr>
<th></th>
<th>Bound English</th>
<th>Russian</th>
<th>Loose-leaf English</th>
<th>Russian</th>
<th>CD (Eng. + Rus.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TACIS Brussels</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>TACIS National CU</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(5 states)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TACIS Monitoring Team</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>(Central Asia – Europe)</td>
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<tr>
<td>TRACECA Coordination</td>
<td>2</td>
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<td>1</td>
</tr>
<tr>
<td>Counter-parts</td>
<td>As necessary</td>
<td>As necessary</td>
<td>As necessary</td>
<td>As necessary</td>
<td>As necessary</td>
</tr>
<tr>
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<td>0</td>
<td>2</td>
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</tr>
<tr>
<td>Asian Development</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Bank, Manila and local</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 have 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 :


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 Consultant/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 Consultant 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.

<table>
<thead>
<tr>
<th>Documents</th>
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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. However, this project is essentially for supply of equipment. 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 consultant 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 Consultant 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.