# **EUROPEAN UNION - TACIS**

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

# TRADE AND TRANSPORT SECTORS

Terms of Reference

for

Forwarding - Multi-modal Transport Systems

Operating Freight Transport on Traceca route

Final Recipients: TRACECA Region Ministries of Transport

# Forwarding - Multi-modal Transport Systems Operating Freight Transport on Traceca route (TRACECA Project No. 8)

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## 1. Introduction and Background

- During May 1993 a conference was held in Brussels organised by the Commission and attended by authorities of the eight Republics of the south of the former USSR:
- Armenia,
- Azerbaijan,
- Georgia,
- Kazakstan,
- Kyrgyzstan,
- Tadjikistan,
- Turkmenistan,
- Uzbekistan

They are the Beneficiary States of this programme.

The objectives of the conference were:

- to stimulate cooperation among the participating Republics in all matters pertaining to the development and improvement of trade within the Region
- to promote the Central Asian Trans Caucasian Europe Transport Corridor
- to identify problems and deficiencies in the Region's trade and transport systems
- to define, in terms of contents and timing a Technical Assistance Programme to be financed by the European Union (EU).

TRACECA (Transport Corridor Europe Caucasus Asia) was thence created as a component of the TACIS interstate programme.

1.2 The "Brussels Declaration" issued at the conclusion of this conference recommended the European Union to address in the TACIS programme variously expressed needs for feasibility studies and technical assistance projects.

Regional sectoral Working Groups (trade, rail, road, maritime), composed of experts and officials from each TRACECA state and the EU, have been established as part of the TRACECA programme. They meet periodically in the Region. They have inaugurated specific projects including this present one, and will monitor results.

A strategic study for Central Asia has recently been completed by the EBRD under TACIS financing (see 3.4).

1.3 Transport demand has declined since the break up of the FSU. East-West transit links are little exploited and North-South links were artificially discontinuous at the old borders of the FSU.

Radical Institutional transformations are taking place in the region. The transport system has been particularly affected by these, especially the rail sector which is loosing market share to the benefit of road transport.

Tariff structures under the old regime were detached from economic considerations. It is by no means easy for regional authorities to inaugurate a market-based system.

1.4 While the present macro-economic situation in the region appears moribund, there is strong private sector interest in large-scale regional industrial investments. The area is rich in natural resources, including substantial reserves of petroleum. There is an undoubted potential for rapid development of certain poles, which would immediately overstrain the present transport system.

The newly independent states are intensely interested in developing national systems, and there is a very real risk that this could lead to restrictive regulation of cross-border transport and trade, to the detriment of overall efficiency.

1.5 This project is aimed to provide Technical Assistance for the development of intermodal transport to rail and other transport organisations in the region.

Containerisation and related techniques have become an integral part of the transport systems of all modern economies, offering faster handling and transit times and reduced transport cost. Intermodal services in the region are currently based upon use of domestic small box containers, and service is poorly developed. The use of 20-foot ISO containers is minimal, and the ability to handle 40-foot containers is severely limited. At the present time, freight marketing is limited to local efforts, and there is no control or coordination of marketing for intermodal services.

- 1.6 The development of container and intermodal transport is essential for the countries concerned, both for domestic reasons and to become fully integrated in international trade. The vast size and the land-locked position of many of the countries offer particular reasons to take advantage of containerisation and integrated intermodal transport. The same holds for the benefits of safety from pilferage and protection from damage en route that container transport offers in door-to-door services.
- 1.7 The central TRACECA project scenario is based upon the east-west corridor passing through the Caspian Sea. The interests of beneficiary states both in the Caucasus and in Central Asia include north-south routes, into Russia and into the ECO countries to the south.

## 2. Objectives

There are several interrelated objectives or outputs:

- 2.1 Provide consultancy advice and technical assistance in order to solve existing problems in the organisation of multi-modal transport within the TRACECA area and in connection with East-West and North-South international routes
- 2.2 Set up an intermodal freight transport group, covering all TRACECA countries, and carry out with this group a study visit to EU.
- 2.3 Identify a number of specific rail corridors and existing intermodal platforms that are judged appropriate to stimulate intermodal services in the region, and select the most promising corridor to set up a case study project.
- 2.4 Design intermodal services in the selected corridor in cooperation with the national and local authorities and train the staff involved in appropriate intermodal technology and commercialisation.
- 2.5 Develop proposals to improve intermodal services in the region, including the necessary technical and financial measures to be taken

The Consultant's work is expected to emphasise in particular:

- Technical and economic assessment of the feasibility of establishing a well functioning and efficient intermodal transport network in the area
- Transfer of intermodal technology know-how, especially in the area of the ISO container handling and new transport techniques
- By means of a case study, provide assistance to rail and intermodal transport organisations in the area to design and operate commercially oriented intermodal services.

## 3. Scope of Work

To meet the stated aims, the work will be organised in 3 phases. These phases may be overlapping. The study is expected to be carried out by a multidisciplinary team, involving expertise in intermodal management, engineering, operations and intermodal marketing.

- 3.1 Phase 1: Analysis § Recommendations for Improvement of Systems
- 3.1.1 After redefining the work plan as necessary, Phase 1 will then provide:
- -a detailed survey of the multi-modal transport system and terminals in the region, including localisation and equipment of key installations, train service, traffic volumes, tariffs and present organisation
- -a preliminary assessment of the state of the existing systems, covering analysis of management, technological, operations, marketing and commercialisation topics.
- -strengths and weaknesses of the existing situation
- -a summary of the present experience with multi-modal transport in EU-countries will also be compiled and be available (in the Russian language) before the study visit
- -recommendations for improvement of systems
- 3.1.2 The current intermodal infrastructure, technology, facilities and systems will be assessed mainly through discussions with the staff of the regions' organisations and through field visits.

The assessment will extend to a quantitative overview of multi-modal operations, current flows and costs, on the principal domestic and international Regional corridors. The existing sites most appropriate for case studies in later phases of this project are to be identified.

A parallel project, the Regional Traffic Forecast Model study (see 3.4 Other Related Projects) will carry out a comprehensive review of traffic on all modes throughout the Region. Synoptic long term forecasts of traffic (including multi-modal) will be made. Sites of highest long term interest for multi-modal infrastructure development will be identified, and investments analysed to feasibility level if necessary, within that project. This present Forwarding and Multi-Modal study is to concentrate on immediate technology transfer and operations management, using the existing system, as described within this Scope.

- 3.1.3 The strengths and weaknesses of the existing situation will be highlighted in perspective of the local environment and aspirations.
- 3.1.4 The specifications for improvement should emphasise, among others, promoting the use of a single technology in an international perspective. A single transport documentation and waybilling system for both domestic and international freight should also be aimed for. Collaboration with the Transport Legal Reform, Trade Facilitation projects, is to be foreseen (see 3.4 Other Related Projects).
- 3.1.5 The study will concentrate on inter-urban movements of goods in the international multi-modal corridors of interest. The primary mode of interest is rail, but road feeder and distribution services are also included, as are maritime services (including Inland Water Transport), if relevant.

- 3.1.6 The consultants are required to propose a detailed technical analysis approach to the study as part of their Methodology.
- 3.2 Phase 2: Study visit in EU countries
- 3.2.1 An intermodal freight transport group will be set up. The study visit participants will be drawn from all TRACECA countries and will be selected by the Consultant in consultation with the TRACECA Management and National authorities.

The study tour will cover several railroads and intermodal organisations in EU-countries. The proposal will indicate the proposed study visit programme, which should cover at least two countries and last about 2 weeks for 14 participants.

- 3.2.2 The purpose of the study visit is:
- to examine the organisation and operation of multi-modal transport in Western countries will be examined from a technical and a commercial point of view
- to familiarise the participants with intermodal technologies currently used and under development in the West
- to visit relevant freight forwarding and shipping companies
- 3.3 Phase 3: Case Study (selection and execution) and Training
- 3.3.1 This part of the project is considered as the core of this technical assistance effort and should involve a maximum of local participation.

The aims of the case study are:

- -to provide short-term solutions to fluidify international intermodal traffic in the selected corridor
- -to work intensely together with the local organisations to design intermodal services in the selected corridor and train the staff involved in appropriate intermodal technology and commercialisation
- -to gather information regarding medium term solutions to set up advanced systems for intermodal transport in line with the latest international practice.
- 3.3.2 Selection of intermodal corridor and sites for the purpose of implementing the case study:

A number of specific rail corridors and sites that are judged appropriate to stimulate intermodal services in the region will be evaluated. Given the radical economic changes underway, a detailed traffic analysis based on extrapolation of trends is not appropriate.

The selection will be based on conclusions of Phase 1, and will in particular require to coordinate the evaluation of intermodal engineering and marketing findings.

The selection of the intermodal corridor and sites will take into account:

- demand
- macro-economic and socio-economic projections
- the intermodal transport system (infrastructure, vehicles, organisation) characteristics

The selection is to be developed in consultation with the TRACECA Management and National authorities.

# 3.3.3 Execution of intermodal case study:

During its implementation, the case study will concentrate on :

- -solving, at least partially, specific problems related to the current organisation of intermodal transport
- -training
- -proposing recommendations for future development of intermodal services

The case study execution will start with a "work" part, carried out by the consultants in close cooperation with the selected counterparts, and a "training" part that will include training on one or several sites in the region. These two parts may be run in parallel.

The following topics will be addressed and included:

- setting up of a marketing organisation for the promotion and sales of the intermodal transport products
- carry out a market survey study for the intermodal move of containers to indicate where the use of rail will be viable
- organise sales training
- organise personal sales campaign with potential industrial clients, freight forwarders and shippers
- determine market-based tariffs and railroad costs
- determine the type, schedule and frequency of service on the selected corridor
- review and give advice on container terminal organisation and operation
- give advice on container terminal infrastructure and handling equipment
- design the operation of economic, efficient, safe and reliable intermodal train services
- give advice on the organisation of road delivery to and from terminals
- give advice for the necessary accounting and waybilling systems, including international services, covering document flows and forms used in intermodal traffic
- work out proposals for the ownership and management of intermodal transport systems
- proposals for the further development of rail and intermodal transport, both within the region and in an international perspective. The consultant will concentrate on options that make better use of existing capacity and also identify options for investment and finance

During the case study, progress review and on-the-job training will be continued. The consultant will then also assist the counterparts involved with the project to set future objectives and devising the means to achieve them.

The case study should result in setting up:

- a door-to-door intermodal service in the selected corridor (must be large enough for intermodalism)
- an intermodal marketing organisation
- a specification of technically uniform and internationally acceptable standards for physical handling and transport
- a proposal for uniform and internationally acceptable standards for document handling, tariffs and waybilling
- 3.3.4 The consultant will clearly specify in his proposal the nature and the cost of training aids, hardware and software that he intends to supply to support the implementation of the study.

## 3.4 Other Related Projects

4.4.1 Several related reports prepared by Western consultants precede this project.

They include:

Rail Management Restructuring Studies TACIS		Armenia, Turkmenistan, Azerbaijan					
Rail Sector Survey Roads & Road Transport Study	Russia	, Ukraine, Kazakhstan & Bielorussia , Ukraine, Kazakhstan & Bielorussia					
Central Asia Outline Transport Strategy  Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan, EBRD/TACIS							

Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan EBRD/TACIS Caspian and Black sea Port Studies Georgia, Azerbaijan, Turkmenistan, Kazakhstan EBRD / TACIS / OTHERS

ESCAP studies Asia UN

3.4.2 At the time of writing, the following projects, sharing certain domains of interest with this one, are expected to commence shortly:

Regional Traffic Forecasting Model, Review of Int'l Route Capacity,	
and a TRACECA Corridor Feasibility Study Europe - Asia	TRACECA
Trade Facilitation, Customs Procedures, Freight Forwarding	TRACECA
Infrastructure Maintenance - Railways	TRACECA
Inland Terminals - Railways	TRACECA
Rolling Stock Maintenance-Railways	TRACECA
Transport Legal Reform	TRACECA
Implementation of Pavement Management Systems	TRACECA
Improvement of Roadside Services	TRACECA

The Regional Traffic Forecasting Model, above mentioned and referred to in 3.1.2, is expected to include:

- identify the best positioned centres for development of multi-modal nodes
- a specific road/rail and multi-modal feasibility study evaluation of the Horges/Druzhba-Turkmenbashi-Baku-Batumi/Poti corridor, including links to Kyrgyzstan, Tadjikistan, Armenia and north-south direction links taking into consideration the interest of each TRACECA state. Options for improvements to bottlenecks along the corridor are to be identified (e.g. relief of congestion points, bypasses of urban areas,...).

Other related projects are or may be expected to commence within the timeframe of this present one.

3.4.3 The Consultants appointed to carry out this project are to coordinate their work closely with all other related activities within the TRACECA region. A full collaboration with such projects will be required.

The preceding listing of related projects must not be considered limitative.

# 3.5 Local Participation

3.5.1 National consultants should be deeply involved in all aspects of the project. All TRACECA countries have Institutions specialising in various aspects of transport planning and engineering.

It is a firm requirement that Organisation and Methodologies include local experts and Institutions to:

- make full use of local experience, antecedent projects and data bases
- promote the emergence of a financially viable local consulting sector
- ensure the effective transfer of know-how to the Beneficiary states
- ensure the enduring effect of project output
- 3.5.2 Consultants should base their activities largely in the TRACECA region, carrying out the project in collaboration with a local technical organisation(s), and employing both senior and junior professional staff, from several TRACECA states.

The Consultants Methodology should fully explain his training and know-how transfer programme within the project.

Consultants must make amply clear in their proposal the arrangements they have made to work with local entities.

## 3.6 Foreign Expertise

The Consultant is free to compose his expatriate team for this project as he sees fit, but the following domains of expertise should be clearly visible in his proposed staff list:

- intermodal engineering
- intermodal operations (railways and other modes)
- intermodal transport management
- intermodal marketing
- intermodal transport planning
- intermodal transport economics

## 3.7 Logistics

The Consultant shall be responsible for arranging necessary living accommodation, transportation, telecommunications, equipment, surveys, investigations, document reproduction, printing, secretarial services, office space and all other input required for the purposes of the work.

# 4. Time Table and Reporting

- 4.1 The project is to be completed within a period of eleven months.
- 4.2 It is important that reports should not be considered the principal project output, and should not distract from the achievement of the defined project Objectives. Reports may be considered as management tools.
- 4.3 All reports are to be delivered in the numbers, languages and locations as follows:

	Bound		Loose-leaf		Diskette
TACIS Brussels	English 5	Russian 1	English 1	Russian 1	(Eng.+Rus)
TRACECA CU (per state)	I	5	1	1	0

The word processing programme to be used will be agreed with TACIS.

4.4 Reporting is to be in accordance with standard 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 each individual TRACECA state taking into account the parallel 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.

Project progress report

This report will be submitted at the end of month 6. It will cover technical progress to date, and will include, in particular, the results of Phase 1 and 2 above mentioned.

One month will be allowed for TACIS to consider the contents and to orient the final phase of this project.

Final Report

The Draft Final Report will be submitted at the end of month 11.

Any comments on the Draft Final Report will be issued by TACIS Brussels within six weeks of its receipt. The Final Report incorporating any modifications will be issued one month thereafter (2,5 months after issue of the Draft Final)

All Reports must include an Executive Summary.