### TRAFFIC FORECASTING AND FEASIBILITY STUDIES

Geographic Focus: All the TRACECA States, including Ukraine, Moldova

and Mongolia; with focus on the Caspian Sea region

Project Budget: EURO 2,000,000

Contractor: BCEOM / HPTI, NEA, Port de Marseille, TYPSA,

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**Implementation timetable :** August 1999 for 18 months

### Introduction

The TRACECA Working Groups and projects carried out previously have developed themes and identified opportunities such as: (i) creation of a traffic database, including forecasts; (ii) set-up of a new Caspian Shipping Line, competing with the Caspian Shipping Company based in Baku; (iii) rehabilitation of the rail ferry terminal in the port of Aktau, Kazakstan; (iv) improvement of the navigation channel for the port of Turkmenbashi, Turkmenistan; (v) survey on the transport of crude oil and oil products on the Caspian Sea. These issues are prerequisites for the development of transport links across the Caspian Sea – both rich in mineral resources and a bottleneck for east-west transport in the region -, and for the attraction of funds by IFIs or private investors.

## **Objectives**

- 1) creation of a traffic database, including forecasts; this would both reanimate and sustain the Regional Traffic Database and Forecasting Model developed previously, and serve as input for the other project components;
- 2) improvement of transport links on the Caspian Sea, in order to provide better access to EU and world markets for the landlocked countries in Central Asia, in particular for the export of mineral resources in the Caspian Sea and agricultural products in Central Asia; the improvements envisaged here are (i) creation of a new Caspian shipping line, (ii) rehabilitation of the rail ferry terminal in Aktau, Kazakstan for services to Baku, Azerbaijan, (iii) improvement of the navigation channel in Turkmenbashi port, Turkmenistan and (iv) rehabilitation of the oil terminal in Dubendi, Azerbaijan.

### **Key Issues**

Traffic Forecasting

- Establish systematic multi-modal data collection in the format of the existing TRACECA database (road, rail and maritime).
- Carry out any additional site surveys to fill in or verify the data sets.
- Establish a centralised or dispersed permanent database with systematic linkage and access for the region, on a sustainable basis.
- Carry out traffic modelling studies as required by the feasibility studies below.
- Carry out a structured programme of training in transport database design and management.
- Encourage regional collaboration and delegate work to local institutions.

### Feasibility Studies

### (i) New Caspian Shipping Line

 Carry out detailed surveys (origin-destination, tariffs, etc.) of all present Caspian Sea traffic. Seasonal and other exceptional variations are taken into account.

Non-TRACECA O/D are covered, such as transit through the Volga-Don and Iranian ports. The major shippers such as oil companies are interviewed.

- Carry out a detailed investigation of the technical conditions for navigation on the Caspian and Volga-Don (ports, vessels, waterways, etc.). Use existing sources and augment as necessary with site investigation. Investigate the position of all present operators on the sea. Investigate the regulatory environment, state cargo quotas, tariff regulations, charter rates, and other local parameters of bearing.
- Investigate the intentions, and possibilities, of existing companies and new operators who might be attracted to the market (states, private, EU, etc.).
- Develop the most feasible options for the establishment of new lines. Report in detail a proposed business plan, indicating the most potentially profitable programme to establish any such line (market segments to be served, procurement of fleet, staffing, registration, financing, etc.).
- Discuss in detail the development of the business plan with local interested operators, such that they might adopt the plan if appropriate. Likewise, discuss in detail the plan with interested development banks who might wish to invest.

# (ii) Rehabilitation of the Rail Ferry Terminal in the Port of Aktau, Kazakstan Investigate and report on:

- the demand for the service, including detailed O/D studies of existing traffic across the Caspian Sea;
- the probable investment costs, operating costs and revenues;
- the availability and willingness of ferry operators to serve the port.

#### Recommend:

- the preferred technical alternative to reopen the terminal;
- the institutional structure for ownership and operation of the terminal.

## (iii) Improvement of the Navigation Channel in Turkmenbashi Port, Turkmenistan

Investigate and report on:

- the existing depths of the channel;
- the historic records of channel depths, local operators and consultants' reports;
- past and current dredging practice;
- the current equipment for dredging at the disposal of the port;
- channel marking issues (buoys, lighting, etc.).

### Recommend:

- a channel maintenance plan, using as far as possible the existing resources at the disposal of the port;
- an investment plan or schedule for items not at the disposal of the port and essential to continued operations.

The recommendations should take into account fluctuations of the Caspian Sea, and offer a similar factor of security for future operations, as has been the basis of the port reconstruction currently planned

### (iv) Rehabilitation of the Oil Terminal in Dubendi, Azerbaijan

- forecast the transport of crude oil and oil products on the Caspian Sea;
- make an in-depth evaluation of the available infrastructure (storage, maritime transport, filling and emptying of vessels and reservoirs);
- make bankable specific feasibility studies for the oil terminals at Dubendi (near Baku, Azerbaijan), Aktau, Kazakstan (berths 4, 5 and 8) and Turkmenbashi, Turkmenistan, comprising technical and financial analysis of total rehabilitation (at long term), intermediate rehabilitation (medium term) and urgent rehabilitation (short term).