

5. REGIONAL TRAFFIC FORECASTING MODEL

Geographic Focus:	Republic of Armenia, Azerbaijan Republic, Georgia, Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan, Republic of Uzbekistan
Project Budget:	EURO 700,000
Contractor:	WS Atkins
Implementation timetable:	December 1995 through October 1997

Background

Demand forecasting is essential to transport planning and investment, in a free-market economy. This project was designed to assemble the data elements and construct a software model required to forecast transport demand on all modes of transport throughout the Region.

Objectives

- To establish common regional databases, compatible with EUROSTAT and CETIR for the capture and dissemination of transport and trade flows, transport infrastructure characteristics and transport costs that would provide a multi-modal model for developing forecasts and analysing scenarios.
- To highlight the main commercial, institutional, organisational, physical and infrastructure bottlenecks, both present and anticipated and to identify and catalogue specific road/rail/maritime and multi-modal projects, which best address problems highlighted.

Key Issues

Reliable data is extremely difficult to obtain throughout the region. Collection methods are manual rather than computer based, and much data is still regarded as secret.

This TRACECA project was required, firstly to assemble all relevant available existing data, then for general forecasting and to assist in developing a number of case studies for transport system development. It was therefore required to work closely with other projects.

Achievements

The project developed a data collection methodology based on existing dispersed data sources held by railways, roads departments, and international commodity flows obtained from Customs declarations. Ten categories of commodity flows were obtained from the national rail operators. Highway departments provided road traffic counts. Cost data was obtained from freight forwarders.

An origin-destination matrix of trade flows based on customs data, and a database of existing traffic on CD together with a user manual has been issued. This has been used extensively by other projects such as that for rail restructuring in Central Asia. Local partners were extensively involved in the project. Several seminars were held to demonstrate the technology utilised. Computer equipment and software was handed over to local beneficiaries. Valuable insights into numerical aspects of transport planning were transferred. Case studies included: new infrastructure links to China from Kazakhstan and Uzbekistan through Kyrgyz Republic, a new north-south rail link from Aktau through Turkmenistan into Iran, the re-opening of peripheral transport links in the Caucasus and the verification of transport demand scenarios developed in other TRACECA projects, including the TRACECA ports, and the Chardzhou Bridge.