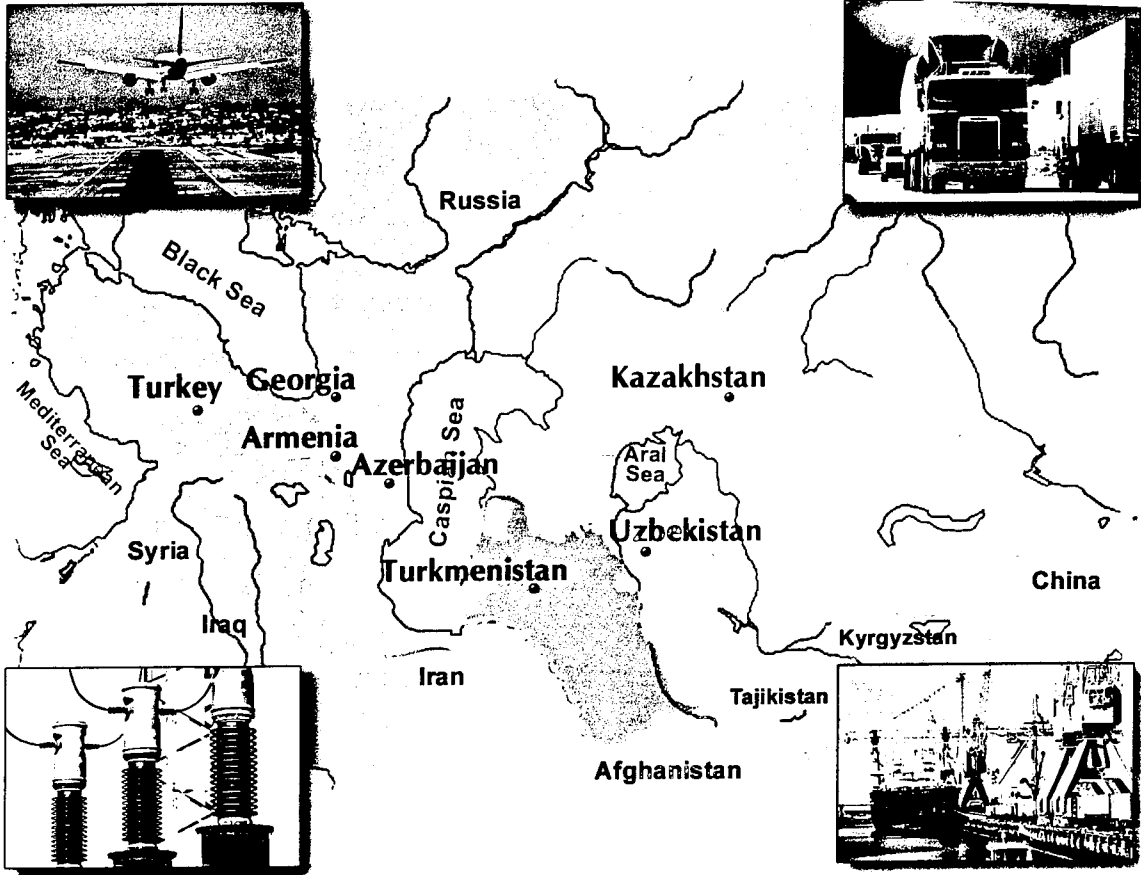




Infrastructure Opportunities in the Caspian Region



PB99-135162



**U. S. Caspian Ambassadors' Tour
April 30–May 7, 1999**

U.S. TRADE AND DEVELOPMENT AGENCY

REPRODUCED BY: **NTIS**
U.S. Department of Commerce
National Technical Information Service
Springfield, Virginia 22161

NOTICE

This document has been reproduced from the best copy furnished to NTIS by the U.S. Trade and Development Agency. Although it is recognized that certain portions may be illegible, it is being released in the interest of making available as much information as possible.

Please direct questions about illegible pages to:

The Library
U.S. Trade and Development Agency
Telephone: 703-875-4357

Thank you.



PB99-135162

TDA

INFRASTRUCTURE OPPORTUNITIES IN THE CASPIAN REGION

U.S. CASPIAN AMBASSADORS' TOUR

April 30 – May 7, 1999

Prepared by

***Louis Berger International, Inc.
Washington, D.C. 20006***

The tour is presented by the U.S. Trade and Development Agency with cooperation from OPIC, Ex-Im Bank, U.S. Department of Commerce, the American Turkish Council and the World Trade Center, New Orleans



This report was funded by the U.S. Trade and Development Agency (TDA), an export promotion agency of the United States Government. The Opinions, findings, conclusions, or recommendations expressed in this document are those of the author (s) and do not necessarily represent the official position or policies of TDA.

Mailing and Delivery Address: 1621 North Kent Street, Suite 200, Arlington, VA 22209-2131
Phone: 703-875-4357 • **Fax:** 703-875-4009 • **Web site:** www.tda.gov • **email:** info@tda.gov



THE U.S. Trade and Development Agency

The U.S. Trade and Development Agency assists in the creation of jobs for Americans by helping U.S. companies pursue overseas business opportunities. Through the funding of feasibility studies, orientation visits, training grants, conferences, and various forms of technical assistance, TDA enables American Businesses to become involved in the planning stages of infrastructure and industrial projects in middle income and developing countries. By doing this, the agency provides American firms with market entry, exposure, and information, helping them establish a position in markets that are otherwise difficult to penetrate.

PROTECTED UNDER INTERNATIONAL COPYRIGHT
ALL RIGHTS RESERVED.
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE

Mailing and Delivery Address: 1621 North Kent Street, Suite 200, Arlington, VA 22209-2131
Phone: 703-875-4357 • **Fax:** 703-875-4009 • **Web site:** www.tda.gov • **email:** info@tda.gov

TDA CASPIAN REGION BRIEFING BOOK

TABLE OF CONTENTS

| | PAGE NUMBER |
|--|-------------|
| List of Abbreviations and Acronyms | v |
| | |
| Section I-Regional and Country Profiles | |
| Regional..... | I-RE-1 |
| Armenia..... | I-AR-1 |
| Azerbaijan..... | I-AZ-1 |
| Georgia..... | I-GR-1 |
| Kazakhstan..... | I-KZ-1 |
| Turkmenistan..... | I-TU-1 |
| Uzbekistan..... | I-UZ-1 |
| | |
| Section II-Project Profiles | |
| Caspian Region..... | II-RE-1 |
| Armenia..... | II-AR-1 |
| Azerbaijan..... | II-AZ-1 |
| Georgia..... | II-GR-1 |
| Kazakhstan..... | II-KZ-1 |
| Turkmenistan..... | II-TU-1 |
| Uzbekistan..... | II-UZ-1 |

PROJECT PROFILES

| PROJECT NAME | PROFILE NUMBER | PAGE NUMBER |
|---|-------------------|----------------|
| CASPIAN REGION | | |
| TransCaspian Pipeline (TCP) | RE 1 | II-RE-1 |
| CPC Pipeline | RE 2 | II-RE-7 |
| Main Export Pipelines (MEP) | RE 3 | II-RE-11 |
| Baku-Batumi Pipeline | RE 4 | II-RE-15 |
| Baku-Supsa Pipeline Expansion | RE 5 | II-RE-19 |
| Maintenance Equipment (GPC) | RE 6 | II-RE-23 |
| Electricity Generation and Marketing | RE 7 | II-RE-27 |
| Trans-Caucasian Rail Link Project (Azerbaijan) | RE 8 | II-RE-31 |
| Trans-Caucasian Rail Link Project (Georgia) | RE 9 | II-RE-37 |
| East-West Silk Road (Armenia) | RE 10 | II-RE-41 |
| East-West Silk Road (Azerbaijan) | RE 11 | II-RE-45 |
| East-West Silk Road (Georgia) | RE 12 | II-RE-51 |
| East-West Silk Road (Turkey) | RE 13 | II-RE-55 |
| ARMENIA | | |
| Electricity Transmission & Distribution Project | AR1 | II-AR-3 |
| Construction Of Unit 5 At Hrazdan TPP | AR2 | II-AR-9 |
| Municipal Development Project | AR3 | II-AR-13 |
| Marriott Hotel Armenia Renovation | AR4 | II-AR-17 |
| Hotel/Tourism Opportunities | AR5 | II-AR-21 |
| Agribusiness Development | AR6 | II-AR-25 |
| AZERBAIJAN | | |
| Oil & Gas Tool Manufacturing | AZ1 | II-AZ-3 |
| Baku Port Development | AZ2 | II-AZ-7 |
| Absheron Oil Reception | AZ3 | II-AZ-11 |
| Railroad Upgrade Project | AZ4 | II-AZ-15 |
| Baku Water And Sewer Rehabilitation | AZ5 | II-AZ-19 |
| Telecommunications Network Improvements | AZ6 | II-AZ-23 |
| Agricultural Development And Credit | AZ7 | II-AZ-27 |
| Urgent Environmental Investment Project | AZ8 | II-AZ-31 |
| Absheron Peninsula Environmental Clean-Up | AZ9 | II-AZ-35 |

| PROJECT NAME | PROFILE NUMBER | PAGE NUMBER |
|--|----------------|-------------|
| GEORGIA | | |
| Supsa Oil Refinery | GR1 | II-GR-3 |
| Privatization/Rehab. of Electricity Generation | GR2 | II-GR-7 |
| Rehabilitation Of Enguri Hydropower Plant | GR3 | II-GR-11 |
| Poti Port Container Terminal | GR4 | II-GR-15 |
| Opportunities At Poti Port | GR5 | II-GR-19 |
| Tbilisi Water And Sewer Rehabilitation | GR6 | II-GR-25 |
| Hotel/Tourism Opportunities | GR7 | II-GR-29 |
| KAZAKHSTAN | | |
| Coalbed Methane Capture & Use | KZ1 | II-KZ-3 |
| Modernizing The Electric Power System | KZ2 | II-KZ-7 |
| Akmolinsk Electricity Distribution | KZ3 | II-KZ-11 |
| Aktubinsk Electricity Distribution Company | KZ4 | II-KZ-15 |
| Atyrau Electricity Distribution Company | KZ5 | II-KZ-19 |
| Kostanai Electricity Distribution Company | KZ6 | II-KZ-23 |
| N. Kazakhstan Electricity Distribution Company | KZ7 | II-KZ-27 |
| Taldi-Korgan Electricity Distribution | KZ8 | II-KZ-31 |
| Turkistanenergo Electricity Distribution | KZ9 | II-KZ-35 |
| Small Hydroelectric Facilities | KZ10 | II-KZ-39 |
| Atyrau Urban Development | KZ11 | II-KZ-43 |
| Almaty-Astana Road | KZ12 | II-KZ-47 |
| Almaty-Bishkek Road Rehabilitation Project | KZ13 | II-KZ-53 |
| Railroad Equipment & Services | KZ14 | II-KZ-57 |
| Track Maintenance Equipment & Services | KZ15 | II-KZ-61 |
| Atyrau Pilot Water Supply & Sewerage | KZ16 | II-KZ-65 |
| Atyrau Airport Rehabilitation | KZ17 | II-KZ-69 |
| Astana Airport Rehabilitation | KZ18 | II-KZ-73 |
| Telecommunications Equipment | KZ19 | II-KZ-77 |

| PROJECT NAME | PROFILE NUMBER | PAGE NUMBER |
|---|----------------|-------------|
| TURKMENISTAN | | |
| Seidi Oil Refinery Rehabilitation | TU1 | II-TU-3 |
| Thermal Power Plants | TU2 | II-TU-7 |
| Turkmenbashi Port Rehabilitation | TU3 | II-TU-11 |
| Ashgabat-Mary Road Rehabilitation | TU4 | II-TU-15 |
| Mary Aluminum Plant Construction | TU5 | II-TU-19 |
| Iodine & Bromine Production | TU6 | II-TU-23 |
| Charjou Carbomide Production Plant | TU7 | II-TU-27 |
| Turkmenbashi Steel Pipe Production Plant | TU8 | II-TU-31 |
| Crop Protection & Veterinary Services | TU9 | II-TU-35 |
| Farm Restructuring Support | TU10 | II-TU-39 |
| UZBEKISTAN | | |
| Tashkent Thermal Power Plant | UZ1 | II-UZ-3 |
| Navoi Thermal Power Plant | UZ2 | II-UZ-7 |
| Thermal Power Plants | UZ3 | II-UZ-11 |
| Second Road Rehabilitation Project | UZ4 | II-UZ-15 |
| Bukhara - Turkmenistan Border Road Rehab. | UZ5 | II-UZ-19 |
| Urban Transport | UZ6 | II-UZ-23 |
| Agricultural Enterprise Restructuring | UZ7 | II-UZ-27 |
| Health Project | UZ8 | II-UZ-31 |

LIST OF ABBREVIATIONS & ACRONYMS

| | |
|----------|---|
| ADB | Asian Development Bank |
| AES | AES Corporation |
| AIOC | Azerbaijan International Operating Company |
| ANB | Azerbaijan National Bank |
| APC | Almaty Power Consolidated |
| Atm | Atmospheres |
| AZYOL | Azeravtoyol (Highway Management Authority of Azerbaijan) |
| b/d | Million Barrels per Day |
| bb/d | Barrels per Day |
| bcf | Billion Cubic Feet |
| bcm | Billion Cubic Meters |
| BO | Build and Operate |
| BOO | Build, Own and Operate |
| BOP | Balance of Payments |
| BOT | Build, Operate and Transfer |
| CAOPP | Central Asian Oil Pipeline Project |
| CC | Compensation Certificates |
| CHP | Combined Heat and Power |
| CIPCO | Caspian International Petroleum Company |
| CIS | Commonwealth of Independent States |
| CPC | Caspian Pipeline Consortium |
| CPE | Customer Premises Equipment |
| EAP | Environmental Action Plan |
| EBRD | European Bank for Reconstruction and Development |
| ECA | Export Credit Agency |
| ECLAT | Export Credit Loan Arrangement Program of the EBRD |
| ECU | European Currency Unit |
| EIA | Environmental Impact Assessments |
| EIB | European Investment Bank |
| EMS | Energy Management System |
| EMU | Electric Multiple Unit |
| EPA | U.S. Environmental Protection Agency |
| EU | European Union |
| EU-TACIS | European Union-Technical Assistance to the Commonwealth of Independent States |
| Ex-Im | U.S. Export-Import Bank |
| FCS | U.S. Foreign Commercial Service |
| FDI | Foreign Direct Investment |
| FY | Fiscal Year |
| GDP | Gross Domestic Product |
| GEF | Global Environmental Facility |
| GIOC | Georgian International Oil Corporation |
| GPS | Global Positioning System |

Abbreviations & Acronyms

| | |
|-------|--|
| G/t | Grams per Ton |
| GWh | Gigawatt Hour |
| ha | Hectares |
| HPP | Hydropower Cascades (Armenia Project File) |
| HPP | Hydroelectric Power Plant (Azerbaijan Project File) |
| HV | High Voltage |
| ICSID | International Center for the Settlement of Investment Disputes |
| IDA | International Development Agency (World Bank) |
| IsDB | Islamic Development Bank |
| IEA | International Energy Agency |
| IFC | International Finance Corporation |
| IMF | International Monetary Fund |
| ISO | International Standards Organization |
| ITAR | International Traffic in Arms Regulations |
| JSC | Joint Stock Company |
| JV | Joint Venture |
| KEGOC | Kazakhstan Electricity Grid Operating Company |
| km | Kilometer |
| KTZ | Kazakhstan Temir Zholy (Kazakhstan Railways) |
| kV | Kilovolts |
| kW | Kilowatt |
| kWh | Kilowatt Hour |
| LIBOR | London Interbank Offer Rate |
| LNG | Liquefied Natural Gas |
| LPG | Liquid Petroleum Gas |
| m/d | Meters Draught |
| MEF | Ministry of Energy and Fuel |
| MEP | Main Export Pipeline |
| MHPP | Micro Hydro Power Plant |
| MIGA | Multilateral Investment Guarantee Agency |
| MIS | Management Information Systems |
| Mm | Millimeters |
| MOU | Memorandum of Understanding |
| MVA | Megavolt-Amperes |
| MW | Megawatts |
| NATO | North Atlantic Treaty Organization |
| NBK | National Bank of Kazakhstan |
| NBU | Uzbekistan's National Bank for Foreign Economic Activity |
| NDC | National Dispatch Center |
| NGO | Non-Governmental Organization |
| NIS | New Independent States |
| OECF | Overseas Economic Cooperation Fund (Japan) |
| OECD | Organization of Economic Cooperation and Development |
| OPIC | Overseas Private Investment Corporation |

Abbreviations & Acronyms

| | |
|---------|--|
| PIU | Project Implementation Unit |
| PMU | Project Management Unit |
| PPP | Purchasing Power Parity |
| RDC | Regional Dispatch Centers |
| RSA | Revenue Sharing Agreements |
| SCADA | Supervisory Control and Data Acquisition |
| SOCAR | State Oil Company of Azerbaijan |
| SOE | State-Owned Enterprises |
| T/Y | Million Tons per Year |
| TACIS | Technical Assistance to the Commonwealth of Independent States |
| 3G | Third Generation |
| TBD | To Be Determined |
| tcf | Trillion Cubic Feet |
| tcm | Trillion Cubic Meters |
| TDA | U.S. Trade and Development Agency |
| TEU | Ton Equivalent Units |
| T/h | Tons per Hour |
| TPP | Thermal Power Plant |
| TRASECA | Transport Corridor Europe Caucasus Asia (TACIS) |
| TSA | Turkmen Sea Administration |
| UN | United Nations |
| UNDP | United Nations Development Program |
| US | United States of America |
| USAID | U.S. Agency for International Development |
| UTY | Uzbekistan's Railways |
| WLL | Wireless Local Loop |
| WTO | World Trade Organization |



Caspian Region Overview



Caspian Region Oil and Natural Gas Reserves

| | Proven Oil Reserves | Possible Oil Reserves | Proven Gas Reserves | Possible Gas Reserves |
|--------------|------------------------|-----------------------------|---------------------------|-----------------------------|
| | (billions of barrels) | | (trillions of cubic feet) | |
| Azerbaijan | 3.6 - 12.5 | 27 | 11 | 35 |
| Kazakhstan | 10 - 17.6 | 85 | 53 - 83 | 88 |
| Turkmenistan | 1.7 | 32 | 98 - 155 | 159 |
| Uzbekistan | 0.3 | 1 | 74 - 88 | 35 |
| TOTAL | 15.6 - 32.1 | 145 | 236 - 337 | 317 |

EXECUTIVE SUMMARY

Most of the Caspian region's oil and gas reserves have not yet been developed, and many areas of the region remain unexplored. Potential exports of oil and gas from the Caspian region are very large. But the oil and gas deposits are located far from Western markets, in remote and landlocked countries whose pipeline transportation routes have linked them principally with other former Soviet republics.

Soft oil prices and the recent consolidation that is engulfing the oil industry have reduced the urgency to execute some large oil exploration, development, and transport projects in the Caspian region. The emphasis has shifted to upgrading the capacity to lift oil from already productive sites, while increasing oil pipeline carrying capacity along established routes. Also at the top of the list are projects to build the pipeline infrastructure needed to transport natural gas from the Caspian region to Western markets.

Nonetheless, major oil projects require considerable lead time, and work continues. Over the longer term, with a firming of international oil prices, the prospect of developing the potentially enormous hydrocarbon reserves in the Caspian Sea region becomes very attractive, providing the justification for expanded Greenfield exploration, production and oil pipeline carrying capacity.

Pipeline Scenarios. The most likely pipeline scenarios in the near to medium-term are the following:

- The Trans-Caspian Pipeline (TCP), a \$3.4 billion project to transport natural gas from eastern Turkmenistan to Turkey.
- Upgrade of the Baku-Supsa Oil Pipeline, part of a \$1.1 billion project to add an additional platform to the existing Chirag field site to bring the capacity for shipment of oil from Baku, Azerbaijan to Supsa, Georgia to 250,000 barrels per day.
- The CPC Pipeline, a \$2.2 billion project that involves completing the crude oil pipeline from the Tengiz oil field in Kazakhstan to Novorossiysk, Russia.
- The Main Export Pipeline (MEP), costing from \$2.5 - \$5 billion, and designed to transport oil from the Caspian Sea across Turkey to the Mediterranean Sea, requiring throughput of between 20 and 50 million metric tons per year to be cost-effective.

Ancillary projects. Over the next few years, a series of ancillary projects in the oil-and-gas, power, transportation, water utilities, and other sectors will be needed to support the development of the Caspian region, including:

- Upgrading gas field-gathering and processing facilities in Turkmenistan;
- Installing specialized pipelining, trenching, and welding/testing equipment;
- Redeveloping the oil and gas tool manufacturing industry in Azerbaijan;
- Rebuilding and upgrading the Trans-Caucasus road and railway systems;
- Rehabilitating Turkmenbashi (Turkmenistan), Baku (Azerbaijan), and Poti (Georgia) Ports;
- Privatizing the power generation facilities in Georgia, and the electricity distribution companies in Kazakhstan;
- Upgrading urban infrastructure in Atyrau (Kazakhstan), Tbilisi (Georgia), and Baku (Azerbaijan), including major municipal water and sewerage systems; and
- Rehabilitating and building new hotels in Armenia and Georgia.

These projects, many of which will be financed in part by international financial institutions (IFI's) like the World Bank, the Asian Development Bank, and the European Bank for Reconstruction and Development, are in various stages of development and tendering. They represent hundreds of millions of dollars in opportunities for U.S. companies.

ECONOMIC OUTLOOK

The prospect of developing enormous hydrocarbon reserves, and the beneficial impact for regional development, even in the non-oil producing countries of Armenia and Georgia, is part of the allure of the Caspian region. Most of the Caspian region's oil and gas reserves have not yet been developed, and many areas of the region remain unexplored. According to the U.S. Department of Energy, proven oil reserves, at 32 billion barrels (bbls), exceed those of the United States (22 bbls), and the North Sea (17 bbls). And it is estimated that possible oil reserves could be nearly five times proven reserves. Proven gas reserves, estimated to range from 236 to 337 trillion cubic feet (tcf), are comparable to total proven North American reserves (300 tcf), and possible gas reserves could double this amount.

As highlighted in the accompanying tables, the potential exports of oil and gas from the Caspian region are very large. But the Caspian region is located far from Western markets, in remote and landlocked countries whose pipeline transportation routes have linked them principally with other former Soviet republics. Of the 429,000 barrels per day in net exports of oil in 1997, for example, mostly from Kazakhstan, only about 150,000 were exported outside the former Soviet Union. Azerbaijan and Kazakhstan, in particular, stand to benefit from a pipeline infrastructure that improves direct access to Western countries. Georgia and Turkey will benefit from transit fee income as well.

| Caspian Region Oil Production and Exports (thousands of barrels per day) | | | | | |
|---|----------------------|----------------------|-----------------------|-----------------------|---------------------|
| | Production (1990) | Production (1997) | Net Exports (1990) | Net Exports (1997) | Possible Exports |
| Azerbaijan | 259 | 193 | 77 | 55 | 1,000-1,500 |
| Kazakhstan | 602 | 573 | 109 | 311 | 2,000 |
| Turkmenistan | 125 | 107 | 69 | 39 | 50 |
| Uzbekistan | 86 | 182 | -168 | 24 | 50 |
| TOTAL | 1,072 | 1,056 | 87 | 429 | 3,100-3,600 |

Source: U.S. Department of Energy

Inadequate pipeline infrastructure also has exposed the Caspian Sea nations to payment difficulties associated with their dependence on markets in the former Soviet Union. This is demonstrated by the sharp drop that has occurred in net natural gas exports, down from 2.1 trillion cubic feet per year in 1990 to 334 billion cubic feet in 1997.

Even though increased oil exports from the Caspian region will depend largely on further Greenfield exploration and development, there is a tremendous amount of natural gas currently available for production and export in the Caspian region. Instead, the constraint to be overcome is to develop a pipeline infrastructure to gain access to Western markets, and to improve field gathering and processing facilities to take advantage of that access. Turkmenistan, in particular, would benefit from a pipeline that linked its enormous natural gas fields to Western markets.

| Caspian Region Natural Gas Production and Exports (billions of cubic feet per year) | | | | | |
|--|----------------------|----------------------|-----------------------|-----------------------|---------------------|
| | Production (1990) | Production (1997) | Net Exports (1990) | Net Exports (1997) | Possible Exports |
| Azerbaijan | 350 | 212 | -272 | 0 | 400-700 |
| Kazakhstan | 251 | 215 | -257 | 16 | 0-100 |
| Turkmenistan | 3,099 | 611 | 2,539 | 230 | 2,100-2,500 |
| Uzbekistan | 1,439 | 1,808 | 102 | 88 | 50 |
| TOTAL | 5,139 | 2,846 | 2,112 | 334 | 2,550-3,350 |

Source: U.S. Department of Energy

The economic outlook for the Caspian region has shifted for the worse during the past year, because of soft international oil and commodity prices, the financial collapse of Russia, and other shocks, such as the failure of the cotton crop in some countries. These shocks have been magnified by poor economic management and legal and institutional structures that are unable to cope with such shocks. The immediate challenge will be to regain macroeconomic stability and re-invigorate systemic economic reform, while attempting to diversify export markets.

The recent consolidation that is engulfing the oil industry worldwide has tended to reduce the attractiveness of the Caspian region relative to other exploration and development sites around the world. This, combined with some disappointing early results of oil exploration in the South Caspian Sea, has caused some companies to pull up stakes, while those that intend to remain are re-evaluating the extent to which they can afford Greenfield exploration projects.

Despite these adverse developments, there are significant opportunities in the Caspian region in the near to medium-term. As described below in the sector overviews, increasing emphasis is being placed on upgrading the capacity to lift oil from already productive sites, while increasing the capacity to transport it along established routes. At the top of the list are projects to build the pipeline infrastructure necessary to transport natural gas to Western markets. There are also excellent opportunities in the power sector, infrastructure development, tourism, and agriculture. Over the longer term, with a firming of international oil prices, the prospect of developing the potentially enormous hydrocarbon reserves in the Caspian region again becomes very attractive, providing the justification for expanded Greenfield exploration, production and oil pipeline carrying capacity.

There are significant opportunities for U.S. companies arising from economic development in the Caspian region. These are the kinds of projects that are highlighted in this Briefing Book, within the individual country profiles, as well as the regional and country-specific project profiles presented in subsequent sections.

BUSINESS AND INVESTMENT CLIMATE

All of the countries in the region have made great strides during the past seven years to create the institutional framework required for a market-oriented economy. Today, all have laws protecting the rights of foreign investors, and although much remains to be done to provide a stable and predictable investment climate, all are very motivated to attract foreign investment. All have established central banks, tax systems and customs systems, and have made progress in establishing ownership rights and the legal framework to support contracts and market transactions.

On a very broad scale, the countries in the Caspian region can be grouped by their commitment to create a market-oriented economy that is friendly to foreign investors. Armenia, Azerbaijan, Georgia and Kazakhstan tend to be more reform-oriented than Turkmenistan or Uzbekistan. The table below shows how the investment climate differs across the countries according to 8 key dimensions. The "Transparency" dimension ranks the countries relative to each other, rather than globally with respect to all economies in transition.

| Dimension | Armenia | Azerbaijan | Georgia | Kazakhstan | Turkmenistan | Uzbekistan |
|------------------------------------|--|---|--|--|---|--|
| Banking System | <i>Reform-oriented, open to western banks</i> | <i>Reform-oriented, open to western banks</i> | <i>Reform-oriented, open to western banks</i> | <i>Reform-oriented, open to western banks</i> | <i>Selected foreign banks licensed to operate</i> | <i>Mandatory interbank transfers a major problem</i> |
| Currency Convertibility* | Yes | Yes | Yes | Yes | No | No |
| Privatization/Ownership | <i>International tendering of major assets</i> | <i>Open to foreign investors</i> | <i>International tendering of major assets</i> | <i>International tendering of major assets</i> | <i>Production-sharing agreements & joint ventures</i> | <i>International tendering of gas field exploration rights</i> |
| Foreign Investment Laws/guarantees | Yes | Yes | Yes | Yes | Yes | Yes |
| Transparency | High | Medium-Low | Medium | Medium | Low | Low |
| Profit Repatriation | Yes | Yes | Yes | Yes | <i>With difficulty</i> | <i>With difficulty</i> |
| Adjudication | <i>International Arbitration</i> | <i>International Arbitration</i> | <i>International Arbitration</i> | <i>International Arbitration</i> | <i>Local courts</i> | <i>Local courts</i> |
| IMF Program/ Standing | <i>Yes/Good standing</i> | <i>Yes/Good standing</i> | <i>Yes/Suspended</i> | <i>Member/Good standing</i> | <i>No IMF program</i> | <i>Yes/Suspended</i> |

*On current account

Banking Systems. All the countries of the region suffer from weak banking systems, but they have different strategies for building up their banking systems. Armenia, Azerbaijan, Georgia, and to a lesser extent Kazakhstan, are pursuing bank reform policies that will ultimately lead to stronger systems, and now allow foreign banks to operate. Turkmenistan allows some banks with foreign capital to operate on a selective basis, although none of the foreign partners are from OECD countries other than Turkey. Uzbekistan's banking policies are actually stifling business activity. Uzbekistan is attempting to require that all business

transactions must be processed as interbank transfers, rather than cash, and delays of up to several months have created a two-tiered pricing system.

Currency Convertibility/Exchange Rates. There are also considerable disparities among the countries on currency convertibility and exchange rate policy. Armenia, Azerbaijan, Georgia, and Kazakhstan allow free convertibility of their currencies, and with the recent decision by Kazakh authorities to float the currency, the exchange rate in each country is determined by market forces. Each of these countries pursues a policy of exchange rate management, but there are no currency controls or problems exchanging local currencies for U.S. dollars or major European currencies. This is not the case in Turkmenistan and Uzbekistan, where businesses face increasingly stringent currency convertibility restrictions, in part because of large disparities between the official and the exchange rates on the street.

Privatization. Almost all of the countries have made some progress in privatization, although Kazakhstan, Georgia, Armenia, and Azerbaijan are in general further along than Turkmenistan and Uzbekistan. All the countries have privatized most of their small enterprises; most have privatized or leased at least portions of their agricultural sectors; and some, notably Armenia, Kazakhstan, and now Georgia, use international tenders to privatize large state owned enterprises. Indeed, some of the best investment and procurement opportunities will come from fairly transparent privatizations in the power sectors in Georgia (managed by Merrill Lynch) and in Kazakhstan. In many of the countries, the Governments encourage foreign participation in their mass privatization programs. However, these are often controlled by insiders, so foreign investors do best when they work with a local partner or get local legal advice at a minimum.

In general, foreign investors cannot own land, although in many of the countries, foreigners can directly, or through joint ventures, own buildings or manufacturing plants. Profit repatriation is not a problem in most countries, with the exceptions of Turkmenistan and Uzbekistan, provided all taxes and fees are paid.

Dispute Settlement. Adjudication of disputes is a serious issue in all these countries. While the nations have made progress in establishing court systems, courts are still generally not independent nor reliable for transparent adjudication. In Armenia, Azerbaijan, Georgia, and Kazakhstan, investors are able to use international dispute settlement forums. At this time four major foreign investors in Kazakhstan are in international arbitration. Although Uzbek law allows for foreign arbitration, the extent to which this law is in conflict with other Uzbek laws is unclear. International arbitration decisions are generally not binding in Turkmenistan courts.

Transparency/Tax Systems. Tax systems and administration, as well as customs administration, are often in a state of transition and lack transparency. This is true in all of the Caspian nations. Investors and exporters are urged to complete due diligence investigations and if possible work with a known local partner. The old ways of doing business by relying on personal connections and relationships is very strong across the region. Foreign investors are urged to engage well-connected legal assistance before signing any binding agreements.

POLITICAL CLIMATE

Following the breakup of the former Soviet Union, the six former Soviet republics of the Caspian region established themselves as independent nations. The majority of the countries — Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan — have linguistic and historical linkages to Turkey, and opening of political and economic relations with that regional power has enhanced the stability and prosperity of the region. Strong and mutually beneficial political and economic relationships were also established with other OECD countries, including the United States, the EU and Japan.

It is also true, however, that the Caspian region lies between Russia to the north and Iran and Afghanistan to the south, and the nations of the region must balance relationships with the Governments of those countries. And there remain a number of smoldering civil conflicts within and surrounding the region, including those in Afghanistan, Tajikistan, Chechnya (in Russia), Abkhazia (in Georgia), the Nagorno-Karabakh territorial dispute between Armenia and Azerbaijan, and the conflicts between the Kurds and the Governments of Iran, Iraq, and Turkey. Some countries are concerned about the potential for Islamic terrorism, and in fact there was a bombing attack, allegedly by Islamic fundamentalists, as recently as February 1999 in Tashkent, Uzbekistan.

For the most part these civil conflicts appear to be contained, and in particular, the Caucasus is enjoying a period of relative peace, with cease-fires in place in Chechnya, Abkhazia, and Nagorno-Karabakh. The opening of the Baku-Supsa oil pipeline is an example of the benefits that are likely to flow from making further progress in resolving issues among the states and peoples of the Caspian Sea region through negotiation rather than conflict.

SOURCES OF FINANCING

Large-scale project financing in the Caspian Region usually comes from three sources: (1) private foreign concerns; (2) private foreign banks backed by export credit guarantees from their home countries; and (3) the IFIs (i.e., The World Bank Group and regional development banks). Domestic banks are generally too weak or too small to provide large-scale financing, and tend to engage almost exclusively in financing short-term trade. Government procurement of equipment and services from international vendors does occur, but not often.

Government participation in privately financed projects can take the form of transfers of public property in the form of perpetual land-use agreements, entitlements and/or development rights; sovereign guarantees of debt repayment; guarantees of profit repatriation rights; and, through the IFIs, partial risk guarantees.

The following is a discussion of the status of private financing sources in the region, as well as U.S. Government and multilateral institution financing sources available to U.S. firms.

Private Financing Sources

Domestic capital markets in the Caspian region are at best rudimentary, and are not yet able to supply long-term financing. For these countries, foreign direct investment and foreign debt will be the primary sources of financing to supplement public resources in the medium term. Banking systems in the countries tend to fall into two groups: more progressive and less progressive. Characteristics of each group are described below.

In Armenia, Georgia, Kazakhstan, and Azerbaijan, the banking sectors are being transformed more quickly and are characterized as follows:

- Usually have a few large state-controlled banks and 20 – 90 private commercial banks.
- There is at least one multinational bank open for foreign investors to use for day-to-day transactions.
- Few banks can make medium-sized or large loans.
- Most loans are short-term, with high interest rates.
- Banks usually demand collateral up front of equal or higher value than the loan principal, and the countries have weak collateral laws that are difficult to enforce.
- Central banking authorities are improving capital standards and banking supervision.

The banking systems in Turkmenistan and Uzbekistan are more basic and have the following traits:

- Have one or two dominant state-owned commercial banks and 20 – 30 commercial banks.
- Few or no multinational banks open for banking business.
- Few commercial banks able to engage in foreign exchange operations.
- There is one key state banking institution for foreign businessmen and investors, as well as local exporters.
- Central banking authorities are setting exchange rates and regimes in such a manner as to promote multiple exchange rates, and implementing other regulations not generally expected to assist in developing market-oriented banking systems.

Public Financing Sources

To supplement private financing, there are a number of financing alternatives from the IFIs and U.S. Government sources. These include The World Bank Group (IBRD, IDA, IFC, and MIGA); the European Bank for Reconstruction and Development (EBRD); the Asian Development Bank (ADB); the U.S. Overseas Private Investment Corporation (OPIC); and the U.S. Export-Import (Ex-Im) Bank. Beyond this, the U.S. Agency for International Development (USAID) provides very

limited project financing in selected sectors and the U.S. Trade and Development Agency (TDA) finances feasibility studies to facilitate project development.

IFC. The International Finance Corporation is the World Bank's window for private sector financing and for mobilizing financing from other sources. The IFC makes loans, equity investments, guarantees, and standby financing, and provides other financial services like risk management. It can finance wholly owned companies as well as joint ventures. The basic rules are that it takes up to 25% of the total investment, and can take up to 35% of the equity, provided it is not the largest shareholder. IFC participation in projects ranges in principle from \$1 million to \$100 million, although it tends to prefer projects at the higher end of that range. Growth in demand for IFC participation deriving from infrastructure financing is very strong.

IFC

- makes loans, equity investments, guarantees and standby financing
- can finance wholly owned companies as well as joint ventures
- takes up to 25% of total investment
- takes up to 35% of total equity
- participation ranges from \$1 million - \$100 million

IBRD. Funded mainly through borrowings on international capital markets, the IBRD is the largest source of market-based loans to developing countries. It has traditionally been a major sponsor of public infrastructure development. The IBRD mainly lends to Governments and Government agencies, although it also makes loans to the private sector backed by the host Government's counter-guarantee. Its outstanding loans total more than \$100 billion. Beyond this, the IBRD finances technical feasibility studies for infrastructure development projects.

IBRD Guarantees

- can cover partial risk of nonperformance on Government obligations to project sponsors (especially BOTs and BOOs)
- can cover partial transfer risk, triggered by debt-service default
- may only be used for mobilizing funds for new investment projects
- Governments, Government-owned entities and privatized or private entities are all eligible.

The IBRD also can provide guarantees to commercial lenders for public and private-sector projects. The guarantees are intended to mitigate partially those risks which private lenders are not prepared to accept in particular country or project circumstances. These include specific Government obligations spelled out in agreements with the project sponsors (such as those under BOTs and BOOs). Partial coverage of transfer risk may also be extended, in which case the guarantee is triggered by debt-service default. The IBRD also provides guarantees in direct support of the Government contractual undertakings that may be needed to induce foreign direct investment in large-scale oil and gas projects.

IDA. As part of the World Bank Group, the International Development Association (IDA) makes soft loans to the world's lowest income countries. It can make loans with up to 40-year terms and with interest rates as low as 0.75 percent per annum. Currently, IDA has \$5.9 billion in credit approvals. Within the Caspian region, Armenia, Azerbaijan, and Georgia qualify for IDA loans.

MIGA. The World Bank's Multilateral Investment Guarantee Agency was established in 1988 to encourage foreign investment in developing countries by providing investment guarantees against the risks of currency transfer and expropriation, as well as war and civil disturbance. MIGA also provides advisory services to member developing countries. MIGA can insure equity investments for up to 90% of capital contribution plus up to 180% of earnings attributable to the investment. For loans and loan guarantees, MIGA can insure up to 90% of the total value of principal, plus the amount of interest that will accrue over the term of the loan. The agency also can insure 90% of the total value of payments due under technical assistance contracts and similar agreements.

MIGA

- issues guarantees to protect against transfer risk, expropriation, losses arising from host Government's breach-of-contract as well as war and civil disturbance
- insures equity, shareholder loans and loan guarantees issued by equity holders
- also insures technical assistance contracts and similar agreements
- standard term of coverage is 15 years

EBRD. The EBRD is a multinational institution set up with the specific aim of assisting the countries of central and eastern Europe and the CIS to develop into market-oriented economies. Its shareholders include countries from both this region and the rest of the world, plus the European Union and the European Investment Bank.

EBRD

- arranges financing to promote developing the private sector in Eastern Europe and the CIS
- provides loans at a markup over LIBOR, for 5 - 10 years, or up to 15 years for infrastructure projects
- will take up to a 35% equity position
- will arrange a loan syndicate, engage in joint or parallel financing
- can bear political risk

The advantage of the Bank relative to other international financial institutions, aside from its regional focus, lies in its ability to operate both in the public and private sectors and to have at its disposal the broadest range and flexibility of financing instruments. Specifically, the EBRD seeks to promote the development of the private sector within these economies through its investment operations and through the mobilization of foreign and domestic capital. The EBRD's main advantages, compared with private commercial banks, lie in its willingness and ability to bear risk, as a result of its shareholder base. A project has to be commercially viable to be considered. The EBRD prices its products on a commercial basis.

ADB. The Asian Development Bank is the regional development bank relied on by Asian developing countries for development financing. The ADB has programs in Kazakhstan, Turkmenistan and Uzbekistan. The ADB has traditionally been a major sponsor of public infrastructure development, extending loans mainly to Governments and Government agencies. But its private sector policies and strategies have evolved as its developing member countries have come to rely far more on private enterprise and market forces to finance economic growth. The rules are that the ADB imposes a ceiling on its participation of 25% of the total project cost, or \$50 million, whichever is lower. The Bank began private sector operations in 1983 by introducing an equity investment facility, reinforced in 1985 with a non-recourse loan facility.

ADB

- can provide loans and take equity in private sector projects
- takes no more than 25% of the total project cost, or \$50 million, whichever is lower
- significant assistance has been extended for BOT projects

OPIC. OPIC is a U.S. Government agency that assists U.S. investors overseas by: providing loans and loan guarantees; insuring investments against a broad range of political risks; and providing a variety of investor services. OPIC finances projects wholly owned by U.S. investors or joint-ventures, and will take up to 50% of the cost of new ventures. The agency can accept some Government ownership, but 51% of the voting shares must be held privately. The U.S. investor is expected to take at least 25% of the equity of the project. OPIC provides loan guarantees ranging from \$10 million to \$75 million, and direct loans of from \$2 million to \$10 million.

OPIC

- finances projects wholly-owned by U.S. investors or joint-ventures
- will take up to 50% of the cost
- at least 51% of the voting shares must be held privately
- the U.S. investor is expected to take at least 25% of project equity
- provides loan guarantees
- makes direct loans

Ex-Im Bank. The U.S. Export-Import Bank's mandate is to support U.S. exports through programs that help them make sales when other sources of financing or assistance are unavailable or inadequate. Ex-Im provides working capital guarantees to small- and medium-sized companies intending to export, involving guarantees of 90% of principal and interest on commercial loans, with 12-month, renewable terms. Ex-Im also provides export credit insurance, for 100% of political

Ex-Im Bank

- provides working capital guarantees to small- and medium-sized U.S. businesses intending to export
- provides export credit insurance
- makes loan guarantees to foreign buyers of U.S. goods
- can also extend direct loans to foreign buyers of U.S. products

risk and 90-95% of principal for commercial risk. Capital goods may be insured for up to 5 years. Ex-Im Bank also makes loan guarantees to foreign buyers of U.S. goods, covering 100% of principal and interest against commercial and political risk; medium- and long-term financing is also available in these cases. Ex-Im can also extend direct loans to foreign buyers of U.S. products.

An example of the type of financing package that can be developed with IFI financing is the project to develop the Chirag - Azeri Deepwater Guneshli Offshore Field. The EBRD and the IFC recently announced that each institution would invest up to \$200 million in development of the Chirag - Azeri Deepwater Guneshli offshore field in the Caspian Sea, including an upgrade of the pipeline to Supsa. Up to \$100 million from each institution will be syndicated. The facility will be provided by way of five separate loans by each institution to affiliates of BP, AMOCO, PLC, EXXON Corporation, Lukoil Joint Stock Company, Turkiye Petrolleri A.O. and Union Oil Company of California. Citibank, Dresdner Bank and Societe Generale acted as co-arrangers and each contributed \$25 million to the syndicated loans.

REGIONAL OIL & GAS PROJECTS

The following overview of regional opportunities highlights the most likely configurations of Caspian region oil and gas pipelines. In addition to economic and financial considerations, a number of constraints must be considered: payment difficulties already encountered in relying on routes that transit Russia and other CIS; environmental hazards that may be encountered when transporting oil via the Black Sea through the Bosphorus Straits; and sanctions on Iran.

Taking these constraints into account, the most likely pipeline scenarios include:

- The Trans-Caspian Pipeline (TCP). This \$3.4 billion project would transport natural gas 1,800 kilometers from the field fence at Mary, in eastern Turkmenistan, to Erzurum, Turkey, via Azerbaijan and Georgia. Initial capacity to transport 16 billion cubic meters (bcm) to Turkey would rise to 30 bcm per year, with the excess going to European markets. Bechtel and GE Capital are developing the project. (See project profile #RE1.)
- Upgrade of the Baku-Supsa Pipeline. This \$1.1 billion project would involve adding a small additional platform at the Chirag field site and adding pumping stations, improving pipe alignment and constructing a "shadow pipeline" to increase the current Baku-Supsa oil pipeline capacity from 100,000 barrels to 250,000 barrels per day. (See project profile #RE5.)
- The CPC Pipeline. This \$2.2 billion project involves completion of the crude oil pipeline, including pumping stations, tank farm, marine terminal, shore line facility and single point mooring systems, from the Tengiz oil field in Kazakhstan to Novorossiysk, Russia. (See project profile #RE2.)

- The Main Export Pipeline (MEP). This would transport oil from the Caspian Sea to Ceyhan, Turkey on the Mediterranean Sea. Option 1 would transport the oil from Baku across Azerbaijan, through Georgia and Turkey, at a cost of \$2.5 - \$3.5 billion, and require throughput of 20 million metric tons per year to be cost-effective. Option 2 would transport the oil from Turkmenistan, under the Caspian Sea and then along the same route, at a cost of \$3.5 - \$5 billion, and require throughput of 50 million metric tons per year to be cost-effective. (See project profile #RE3.)

Each of these projects is reviewed in the project profiles contained in this Briefing Book. Overviews of ancillary projects related to these activities are presented in the following sections.

OIL & GAS ANCILLARY PROJECTS

A series of ancillary projects in the oil and gas sector will be required to support the Caspian Sea region's pipeline projects and field development. Highlights include:

- Upgrade of Gas Field-Gathering and Processing Services. Ancillary to the project to build a \$3.4 billion Trans-Caspian gas pipeline from eastern Turkmenistan to Turkey, will be the need to upgrade and develop feeder pipelines and processing facilities in Turkmenistan. A feasibility study will be required to determine the extent of this opportunity; IFI financing or guarantees might be considered. U.S. companies should be very competitive. (See project profile #RE1.)
- Specialized Pipelining, Trenching and Welding/Testing Equipment. Currently the pipe laying capability of equipment in the Caspian Sea area is limited to 28" concrete-coated pipe. A significant retrofitting of the equipment to handle 30" or 32", with multiple crossings or a new fabrication system would be needed to handle 36" to 40" pipe. Again, a feasibility study will be required to scope this project out, and U.S. companies should be competitive. (See project profile #RE1.)
- Oil and Gas Tool Manufacturing. An infusion of modern management and manufacturing technologies would be required to bring the old oil and gas tools and equipment industry to international standards. Azerbaijan continues to manufacture more than 80 types of tools and machines to Soviet standards, and interested foreign companies are encouraged to enter into Revenue Sharing Agreements (RSAs) to manufacture one or more tools and/or machines. There are between five and six potentially viable investment opportunities. U.S. companies would hold a significant technical advantage. Plant start-up costs could be as low as \$10 - \$15 million per project for interested U.S. investors. (See project profile #AZ1.)

TRANSPORTATION ANCILLARY PROJECTS

There are a wide variety of projects in the transportation sector coming forward ancillary to the regional pipeline projects described above. These include highway projects, railroad projects, port upgrades, and the purchase of transportation equipment to move pipeline materials. Highlights include:

- **Trans-Caucasus Road Project.** Georgia and Azerbaijan have plans to rehabilitate and upgrade the road link from Baku on the Caspian Sea to Poti Port on the Black Sea. This will include 392 kilometers of road in Georgia and 535 kilometers of road in Azerbaijan. The total cost is estimated to be nearly \$500 million of equipment, materials and services. This represents about \$40 million in U.S. export opportunities. While some financing is in place, both countries are looking for the remaining financing on these road projects, primarily from the International Financial Institutions. (See project profiles #RE11 and 12.)
- **Trans-Caucasus Railroad Project.** Georgia and Azerbaijan are going to upgrade and rehabilitate the rail lines between Baku and the Black Sea ports of Poti and Batumi. The infrastructure consists of 924 kilometers of an electrified double track running from Baku to Poti and Batumi. The total cost of the project is over \$80 million and it represents \$35 million in U.S. export opportunities. Project needs include new track maintenance equipment, signaling equipment, and new sleepers. Both Governments have arranged financing, and bids are expected to go out later this year. (See project profiles #RE8 and 9.)
- **Turkmenbashi Port Rehabilitation.** EBRD is providing a loan of \$30 million toward a total project cost of \$42 million for the reconstruction, rehabilitation, and supply of equipment to Turkmenbashi Port. The balance of the cost will be borne by the Turkmen Sea Administration. U.S. competitiveness is considered to be good for the internationally procured portion. (See project profile #TU3.)
- **Baku Port Rehabilitation.** This project will rehabilitate the facilities at Baku Port in Azerbaijan. The facilities rehabilitation will be accompanied by management system improvements to allow profitable operation. The project will cost about \$40 million, to which the EBRD will contribute a loan of \$30.7 million. U.S. companies should have opportunities worth about \$20 million in exports of goods and services. (See project profile #AZ2.)
- **Poti Port Development.** Sea-Land Corporation is already active in Poti, Georgia, operating a container terminal and shipping business since 1995. Sea-Land is planning to refurbish this container terminal to add to their capacity, reflecting the prospects for increased freight as the first "early oil" pipeline delivers oil to the port for transshipment for the first time this spring. Sea-Land's investment represents good procurement opportunities for U.S. businesses. U.S. businesses should be able to land all of the \$5 - \$6 million in procurement opportunities for this project. (See project profile #GR4.)
- **Railroad Tanker Cars in Kazakhstan.** KTZ, the Kazakh rail company, is upgrading its fleet and improving its tracks and maintenance systems. Shipping oil is one of KTZ's most profitable activities, yet it is short of operational tank

cars. Currently, there are 3,000 out of the company's 12,000 tanker cars out of service for repairs. It will require about \$5 million to rehabilitate the tanker cars. KTZ is a profitable company that had \$1.1 billion in revenue in 1997. The company is working with the EBRD to secure financing for its modernization program. (See project profile #KZ14.)

- **Highway Rehabilitation in Uzbekistan.** The Asian Development Bank (ADB) is financing two major highway rehabilitation projects in Uzbekistan that are integral to regional trade routes. The first will rehabilitate the route between Bukhara and the Turkmenistan border, at a cost of \$136 million (with \$50 million from the ADB). Pending final ADB Board approval, the second will rehabilitate the route from Bukhara to Tashkent, via Samarkand, at a cost of \$70 million (\$60 million from the ADB). (See project profiles #UZ-4 and #UZ-5.)

POWER ANCILLARY PROJECTS

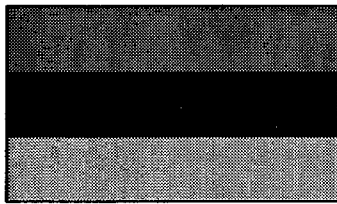
- **Armenia Electric Power Sector Restructuring & Development Program.** This is a \$33 million project, financed by the World Bank. It will: place the power sector on a commercial footing; help meet the country's electricity requirements in a reliable and cost-effective manner; attract private capital to meet the bulk of the capital requirements in the sector; and eliminate quasi-fiscal subsidies. This represents \$25 million of opportunities for U.S. exports of goods and services. (See project profile #AR1.)
- **Privatizing Georgia's Power Sector.** The Government has selected Merrill Lynch to conduct the international tendering of the nation's power assets. Merrill Lynch sold a 75 percent interest in Telasi, the Tbilisi Distribution Company, to AES Corporation, a U.S. company. Merrill Lynch is now preparing to bundle Georgia's hydro and thermal generation facilities and sell the bundles. Bidders will be able to buy up to 75 percent interest from the Government in the bundled facilities, or bid on 25 - 30 year management contracts. (See project profile #GR2.)
- **Modernizing Kazakhstan's Electricity Distribution Network.** About \$250 million will be required to modernize the electricity wholesale and retail distribution system in Kazakhstan. Kazakhstan is also privatizing about 15 regional retail distribution networks and possibly one generation plant that remains under State ownership. The modernization represents about \$150 million in opportunities for U.S. exports of goods and services. The privatizations represent investment opportunities for U.S. power companies. (See project profile #KZ2.)

OTHER ANCILLARY PROJECTS

Regional oil and gas projects in the Caspian Sea region also will have ancillary impacts in terms of the need for new or upgraded public infrastructure, hotels,

housing and other facilities as an offshoot of accelerated development. Among the highlights of these offshoot projects are the following:

- **Atyrau Urban Development Project.** Atyrau is the city that is to be used as the closest urban center to support the drilling activities in the North Caspian Sea. A host of private companies, donor organizations and Government units are planning to develop Atyrau into an efficient urban center to support the activities in the North Caspian. This requires major infrastructure investments, as well as the construction of high-end office space and housing. The scope of this program is likely to be about \$80 million, and will represent about \$40 million in opportunities for export of U.S. goods and services. USTDA has partially funded a feasibility study on the infrastructure needed to support northern Caspian offshore oil and gas development related to Atyrau's development. Dillingham Corporation has taken responsibility for developing this project. (See project profile #KZ11.)
- **Baku Water and Sewer Project.** This program is to be advanced under the authority of the Absheron Regional Water Company. The World Bank and EBRD have loaned \$80 million to modernize Baku's water and sewer system under a Phase I project. Phase II is to start in 2000, and experts estimate that there is \$40 - \$80 million worth of work remaining to be done. A large part of Phase II will emphasize involving the private sector, perhaps in a Build-Operate-Transfer (BOT) scheme. Phase II represents \$10 - \$60 million in opportunities for U.S. exporters of utility equipment and management services. (See project profile #AZ5.)
- **Tbilisi Water and Sewer Project.** The Tbilisi Water and Sanitation Agency is embarking on a \$300 million program to modernize the city's water and sewer systems. The World Bank is initiating a \$30 million project to start on the larger program. This project will: rehabilitate and improve critical units in the water and wastewater systems in danger of immediate breakdown; increase the involvement of the private sector in managing the water utility; and establish a fund that will be managed to rehabilitate parts of the system on a prioritized basis. This represents a \$10 to \$20 million opportunity for U.S. exporters of utility equipment and management services. (See project profile #GR6.)
- **Absheron Peninsula Environmental Cleanup.** The project involves the cleanup of the ecological situation in Absheron Peninsula and bordering Caspian Sea water area. It is expected that the cost of cleaning 1 million cubic meters of soil and 10 million cubic meters of water per year is about \$4.5 - \$5 million. Three to five such systems will be required to complete the cleanup operation for a total project cost of \$15 - \$25 million. No financing sources have yet been identified. (See project profile #AZ9.)
- **Georgia Tourism.** The Republic of Georgia offers some very good opportunities to open new guest lodging serving several different niches in the hospitality industry. In Tbilisi, there is an immediate need for three to four star lodging to serve an increasing volume of business tourists in the near term. Over the longer term, there exist good opportunities nationwide to open small hotels and guesthouses at the two to three star level (U.S. standards) to serve a nascent but growing tourism industry. (See project profile #GR7.)



Armenia Country Overview



BASIC FACTS:

Capital: Yerevan
Area: 29,800 square kilometers
Population: about 3 million
Currency: Dram
Exchange Rate: \$1 = 535 dram
GNP: \$2.1 billion (1998)
GDP Growth: 4.3% (1996); 2.1% (1997); 6.7% (1998)
GNP per capita: \$560 (1998)
Inflation: 0.9 % (1998)

EXECUTIVE SUMMARY

Armenia is a small, strategically located country (land area of 29,800 square kilometers, slightly larger than Maryland) with a literate population of about 3 million. Located in the heart of the Caucasus, Armenia is bordered by Turkey to the west, Georgia to the north, Iran to the south, and Azerbaijan to the east and southwest. The Armenians have a strong tradition of education and entrepreneurship which, combined with their close ties to the U.S. through the American-Armenian Diaspora, provides attractive prospects for joint venture partners and other business linkages with U.S. companies.

Over the past few years, Armenia has successfully managed to implement a comprehensive stabilization and structural reform program. Some of the main achievements include: price liberalization; privatization of small-scale enterprises (over 7,000) and medium/large enterprises (1,800 for sale as of early 1998); and significant progress towards joining the WTO (experts believe that Armenia will become a member this year). In addition, Armenia has strengthened its banking sector by putting in place modern regulatory and supervisory frameworks.

Economic progress will depend on the continuation of the reform program, as well as positive political developments. Armenia's major impediment to development is the trade embargo imposed by two of its four neighbors – Turkey and Azerbaijan. This embargo will remain in place so long as there is no peace agreement with Azerbaijan

Future Opportunities

- Power generation
- Transportation/highways
- Water/wastewater treatment
- Agribusiness
- Tourism /Hotel Development

that resolves the status of the Nagorno-Karabakh enclave. There has been a five-year cease-fire in the eight-year Nagorno-Karabakh conflict, but the potential for renewed conflict still exists and still dampens expectations.

Armenia is politically stable and committed to market reforms. Armenia has good potential in high-tech, light industries, high-value agricultural products, and in the medium term, tourism. These opportunities, coupled with its large pool of underemployed but highly literate labor force, low labor costs, and entrepreneurial spirit, offer some of the most promising advantages in the NIS region for U.S. companies. Some of the most attractive sectors for future business will most likely be in power generation, transportation/highways (establishing an east-west transportation corridor), water and wastewater treatment, agribusiness/food processing, and tourism/hotel development.

ECONOMIC OUTLOOK

Since 1994 Armenia has enjoyed positive growth rates in GDP output. In 1994 and 1995, GDP grew by 5.4% and 6.9% respectively. Growth slowed somewhat in 1996 and 1997, but reached 6.7% in 1998. By late 1996, annual inflation had fallen to under 6% - the lowest in the FSU - as compared to 46% per month in the first quarter of 1994. Now, inflation is less than 1% annually.

The economic progress has earned Armenia increasing support from international institutions. The IMF, World Bank, EBRD, as well as other financial institutions and foreign countries, are extending considerable grants and loans. Total loans extended to Armenia in 1993-1998 likely exceeded \$800 million. These loans are targeted at: reducing the budget deficit; stabilizing the local currency; developing private businesses; energy; agriculture; food processing; land and air transportation; health and education; as well as ongoing rehabilitation work in the region damaged by the 1988 earthquake.

Armenia's output is expected to grow at 6% to 7% per year as the reform program continues to transform the economy and as regional tensions ease. Improvements in both the reform program and regional tensions would remove constraints on external trade, sharply decreasing transport and energy costs, and enhancing access to external financing. Over the next few years, GDP growth is expected to result primarily from rapid private sector development and a rise in capacity utilization. Growth is expected to be led by export demand in the FSU markets as those economies recover, and by increasing penetration of nontraditional markets, such as Middle Eastern and European markets.

BUSINESS AND INVESTMENT CLIMATE

Over the past few years, the business and investment climate in Armenia has consistently improved. Early on in its transition, Armenia passed a law and signed a treaty which protect foreign investors: 1) Bilateral Investment Treaty signed by the U.S. and Armenia in September, 1992; and 2) Law on Foreign Investment adopted by

Armenia in July 1994. These protective mechanisms allow any foreign investor – defined as a foreign company, citizen of a foreign country, person without citizenship residing in a foreign country, Armenian citizen permanently residing outside Armenia, or international organization – to invest in Armenia. Foreign investors can invest in a number of different areas (e.g., joint-stock companies, joint-venture businesses, securities, and paid services), with the exception of natural resources, which is permitted only through concession agreements. The law protects investors' intellectual property rights. According to the Law on Foreign Investment, foreign investments cannot be nationalized or confiscated without due process and just compensation.

Besides basic foreign investment laws, the Government is committed to privatization and has progressively diminished its control over industry. The National Assembly (Parliament) is steadily developing and passing laws which create the framework for a market oriented economy. This commitment to privatization was made clear when the Government sold 75% - 90% of its interests in the following to international firms for cash: the premier hotel in the country; the telephone monopoly; and the nation's most treasured business, the Armenian brandy factory.

The Government is aware that corruption and transparency issues are still serious barriers to business. While the environment is better in Armenia than some of the other countries of the former Soviet Union, problems remain despite Government reform efforts. For example, individuals in Government positions are still engaged in private businesses and frequently use their influence to expand and protect their enterprises, often in a way contrary to established international business practices.

One serious constraint is the lack of a transparent business, regulatory, and tax environment in part caused by a lack of accurate information (particularly in English). The new Civil Code, however, has been translated into English and is available at the U.S. Embassy, USAID, the library at the American University of Armenia, and other local libraries. Still, many of the business laws have numerous sub-regulations and norms that often change and are difficult to trace. Bureaucratic procedures may sometimes appear complex and confusing. Low-paid personnel of state agencies dealing with various business-related issues are often tempted to use the newcomer's limited knowledge of the local environment to ask for a fee to "speed up" even the simplest procedures. Cash "awards" for granting contracts, bank credits, well-paid jobs, and other forms of bribery are widespread.

To avoid these and other complications, the U.S. Embassy recommends that U.S. firms consult thoroughly with local lawyers on every aspect of their future activities in Armenia, including registration, licenses, taxes, particular tax incentives, local accounting principles, import/export procedures, certification requirements, contracts, etc. This is especially recommended for firms entering Armenia for the first time, and for those that have no Armenian partner. Firms are urged to carefully select an Armenian partner, and to adopt a long time horizon regarding expected returns.

POLITICAL CLIMATE

Armenia is a republic in which a President is elected every five years. There were special elections for President held in 1998, after Levon Ter Petrossian resigned. These

were carried out on a more peaceful note than the 1996 presidential elections, improving the image of the country significantly. That image had been hampered by the 1996 elections, when a number of incidents took place where both the opposition, which disagreed with the election results, and the Government, resorted to violence. Tensions have since receded and a reconciliation process is under way.

Armenia enjoys a particularly close relationship with the U.S. On a per capita basis, Armenia is the third largest recipient of U.S. aid. The United States Embassy was the first embassy to open in Yerevan in February 1992. The Armenian Embassy opened in Washington in the same year. U.S. aid to Armenia emphasizes: humanitarian assistance (food and fuel); building democracy and good governance; modernizing the banking system; fiscal reform; restructuring the energy sector; agricultural marketing; and creating a regulatory and a financial framework for private sector development. The U.S. is active in efforts to negotiate an end to the Karabakh conflict. Armenian and U.S. Government officials maintain very close working relations.

In the future, there are two primary political issues that will need to be resolved in order for Armenia to enjoy the benefits of an open, growing regional and global economy. First is the conflict surrounding Nagorno-Karabakh, an Armenian-populated autonomous enclave in neighboring Azerbaijan, which has lowered the attractiveness of investment in the region. A cease-fire has been observed by both sides for more than five years. There is, however, no indication that the embargoes will be lifted in the near future. There has been no substantial progress toward a settlement, though international efforts are ongoing.

The second issue, related to the Nagorno-Karabakh territorial dispute, is the role of Turkey. Turkey has sided with Azerbaijan in this conflict and has established a blockade of Armenia, paralleling that of Azerbaijan. The embargoes have lost a small amount of their economic influence because many Turkish goods and Azeri oil products find their way to Armenia anyway, albeit at much higher prices. Also, since 1995, Turkey has allowed a limited number of passenger charter flights between the two countries as well as Armenian transit flights over Turkish territory. The embargo remains one of the key factors hindering economic development of Armenia. The embargo also ties the hands of many U.S. businesses whose regional headquarters (which usually cover the Caucasus) are in Turkey.

SOURCES OF FINANCING

Armenia's banking sector has two large state-controlled banks (Savings Bank and Ardshinbank) and more than 20 private commercial banks with over 220 branches. Foreign banks are represented by Midland Armenia Bank (member of HSBC group), Rossiyski Kredit Armenia (Russia), and Mellat Bank (Iran). The number of private banks has been slowly declining because the Central Bank has pursued a policy of tightening bank capitalization requirements to push the weak banks into closing or into mergers with stronger banks. The increased requirements and competition force the banks to begin to meet international standards. Consequently, remaining banks are considerably stronger and are subject to close supervision.

The Government has created the legislative environment to encourage the growth of the private insurance market. Marine Midland has opened a commercial insurance subsidiary that is now doing business in the country.

Lending from most private banking institutions is limited by their low capacity (very few banks can provide loans exceeding \$20,000). At present, many private banks limit their lending operations to short-term loans in local or hard currency at a very high rate of interest (up to 6-9 percent/month, or 50-70 percent per annum). These banks usually demand collateral of adequate or higher market value (homes, cars, gold, etc.). By December 1, 1997, total chartered capital of all 30 commercial banks was 16.8 billion dram or \$33.7 million.

The banking situation, however, is beginning to change. Marine Midland, for example, is now lending on one to two year terms to about 40 enterprises at more affordable interest rates. It is unclear, however, how fast this financial deepening of the economy will proceed, especially in light of the economic problems now being experienced by Russia, Armenia's main export market.

Project financing is still limited and is primarily implemented through subsidized loan programs funded by foreign Governments and multilateral financial institutions. The programs are aimed at private business development for specific categories of enterprises. They are serviced by a few local banks and offer loans ranging from \$500 to \$500,000 with, on average, 15-20 percent annual interest. The loans are normally supported by a business plan and are secured by adequate collateral.

The best sources of export and insurance financing are from the U.S. Export-Import Bank and Overseas Private Investment Corporation (OPIC). In July 1997, the Ex-Im Bank signed a General Project Incentive Agreement with Armenia which provides a framework for financing the purchase of U.S. exports, with the loans to be repaid with revenues generated by production from the enterprises buying U.S. goods or services.

To insure their risks in dealing with Armenian partners, U.S. businessmen are encouraged to contact OPIC in Washington D.C. OPIC is a Government-affiliated agency which, upon agreement with Armenia, provides insurance (and reinsurance) coverage against three types of political risks: currency inconvertibility; expropriation; and political violence.

At present, financing for projects in Armenia is provided mainly by the World Bank, EBRD, USAID, OPIC, and TDA (feasibility studies). Most projects financed by international institutions, such as the World Bank or EBRD, are contracted on an international tender basis.

SECTORAL OVERVIEW

Based on discussions with the U.S. Embassy and Armenian officials, some of the best business opportunities in the future are: power generation; transportation/highways (establishment of an East-West transportation corridor); water and wastewater treatment; agribusiness/food processing; and tourism/hotel development.

During the first half of 1998, total investment in Armenia reached \$188 million, with foreign investment totaling \$140 million. In 1997-1998, there were a number of large

investments recorded: more than \$25 million was invested in oil and gas exploration; at least a \$15 million investment was made in gold processing; and \$30 million was invested into the purchase of the Yerevan Cognac Factory. Moreover, \$150 million went into the privatization and purchase of the Armenia Telephone Company.

The sectors that showed solid growth (5 percent on average) included energy generation, chemicals, telecommunications, agriculture, construction and construction materials. Significant growth in the overall number of businesses was observed in wholesale and retail trade (31 percent, mainly food), restaurants (38 percent), passenger and cargo transportation (12 percent), real estate brokerage (29 percent), education (39 percent), and health care and social services (39 percent).

ENERGY

Armenia's energy sector is undergoing changes that are resulting in procurement opportunities for foreign suppliers. While the country's economy is not generating enough funds to independently finance the energy sector projects, procurement is mainly financed by international financial institutions, such as the World Bank and EBRD, or bilateral or foreign aid institutions such as U.S. Agency for International Development. Creative financing is welcome.

The Government recognizes the importance of promoting foreign private investment. World Bank estimates are that about \$1.7 billion in new investment will be needed to reverse the deteriorating situation in the power sector. As such, it is working with donors to establish long-lasting energy sector reforms. Key elements of the Government's energy sector reform program include: 1) strengthening the regulatory capacity of the Energy Commission; 2) introducing IAS-based accounting for sector enterprises; 3) adopting a Financial Rehabilitation Plan for the power sector to restructure the stock of receivables and payables and to prevent the growth of new arrears; and 4) implementing, with donor assistance, a privatization program. Some of the more promising business opportunities related to this program include:

- **Power Delivery.** The World Bank is moving ahead with a \$33 million credit for an Electricity Transmission and Distribution program. The project seeks to rehabilitate/modernize transmission and distribution networks. Opportunities exist for procurement of dispatch systems, cables, transformers, electric metering systems, and other related equipment. (See project profile #AR1.)
- **Thermal Power.** The Ministry of Energy is hoping to find investors to buy into the construction of a 300 MW gas-fired power station. The EBRD plans to assist the Government to find an investor to complete construction of a 300 MW generation unit at Hrazdan TPP. Investors are also sought to privatize the entire Hrazdan TPP complex. (See project profile #AR2.)
- **Hydro-Power.** More than thirty small hydro-power plants are undergoing privatization. The plants are in various stages of readiness, starting with almost Greenfield and ending with operating facilities. Thirteen of those plants were already privatized in the beginning of 1997. Owners of most of the plants need to renovate/upgrade the facilities. Opportunities may exist for procurement of small hydro-turbines, and related equipment.

TRANSPORTATION

Armenia's highways received little or no maintenance from the mid-1980s to 1996. In 1996, World Bank-financed road rehabilitation projects began to restore key arterial links. Armenia has the potential to be the transportation corridor between Georgia and Central Asia and Turkey and Europe. Assuming the Turkish blockade will be lifted, the U.S. has studied two road and two rail links that would facilitate trade between Georgia and Turkey that transit Armenia. For the roads, the link from Sadachlo on the Georgian border to Kars, Turkey via Gyumri would require about \$92 million to upgrade the road in Armenia. The link from Sadachlo to Igdir, Turkey via Echmiadzin would cost a minimum of \$19 million to upgrade the road in Armenia. The World Bank's ongoing and upcoming transportation loans may cover \$60 million of the total cost of restoring the Gyumri link and \$8.5 million of the cost of restoring the Echmiadzin link. (See project profile #RE10.)

The rail link parallels the road route via Gyumri from Georgia to Kars, Turkey. The World Bank's ongoing loan program is assisting the Armenian Railways Corporation upgrade its Armenia-Georgia service. Moreover, the World Bank's pending third transportation loan to Armenia would devote adequate funding to this track given current traffic. Should traffic increase, about \$700,000 to \$800,000 should be invested to upgrade the track near the border with Georgia. These, however, may be underestimates.

TOURISM

The Republic of Armenia offers some good opportunities to open new guest lodging which serve several different niches in the hospitality industry. The country has both good scenic destinations and cultural sites. Armenia is a small, rocky country with splendid mountains and canyons, beautiful forest regions in the North, and the magnificent Lake Sevan located at more than 2,000 meters above sea level. In the southwest of Yerevan, the rocky terrain gives way to the Ararat Valley, full of fruit plantations and vineyards. From here one can observe a splendid view of the biblical Mount Ararat, with its two snowy summits towering high over the horizon. Armenia is the source of several unique cultivars and species of birds and wildlife. This provides for some good ecotourism opportunities.

Armenia is also rich with ancient monuments - Christian churches and monasteries, some of which date back nearly to the birth of Christianity. Some of them are concentrated in the holy city of Echmiadzin, the residence of the head of the Armenian church, the Catholicos of All Armenians. Armenia also has a good skiing base in Tsakhkadzor.

The country's tourism infrastructure is in an early stage of development. The years of conflict in neighboring Azerbaijan have diverted tourists from this formerly popular region. The Government has negotiated the sales of its three major hotels in Yerevan to foreign investors. In 1996, tourist traffic resumed and started to grow. In the next few years there will be opportunities in the following:

- Rehabilitation of the Hotel Armenia. This rehabilitation job will be supervised by Marriott International and will cost about \$22 million. (See project profile #AR4.)
- Development of small hotels and guesthouses. There are good opportunities to open small hotels and guesthouses (2-3 star level) to help develop the ecotourism and religion-based tourism opportunities. (See project profile #AR5.)

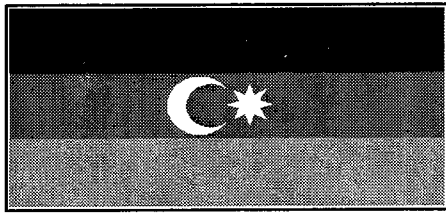
AGRICULTURE

Food products constituted 30.8 percent of total Armenian imports in 1997. Seventy percent of all consumed food was imported. In general, food imports have been growing, while local production has been declining due to high production costs. Imported foodstuffs are mainly of Iranian, Turkish, Russian, UAE, European, and U.S. origin. U.S. imports are primarily meat and poultry products, eggs, grocery items, beer and alcoholic beverages. U.S. food exports to Armenia grew sharply in 1996-1998 with the establishment of U.S. and European food distributors in Yerevan. Though no statistics are available, U.S. commercial exports are expected to increase in 1999 and may even dominate the market in some sectors, such as meat and poultry. Meat and poultry products, eggs, sugar, flour, soft drinks and alcoholic beverages represent the best export niches in the market.

Armenia is famous for its fruits and vegetables, which due to soil and climatic conditions, high altitude, and limited use of chemical fertilizers, are rich and flavorful. With modern processing and packaging technologies, Armenian fruit and vegetable products can successfully enter international markets. Most food processing plants and canneries in the country, however, have outdated equipment, cannot provide export-quality products, and are looking for foreign partners. This sector is already beginning to attract U.S. investors, who are considering several projects in tomato paste and fruit juice production and packaging for local markets, as well as for export. From 1996, the U.S. Department of Agriculture began an ambitious project aimed at assisting Armenia in processing, packaging, and exporting its fruits and vegetables.

Cheese factories are just beginning in Armenia on a commercial scale and may represent opportunities in the future for U.S. investors. The USDA Marketing Service in Armenia is looking for U.S. suppliers of irrigation equipment for farms of about 300 acres. There are also opportunities in feed mixing and distribution as well as fertilizer production and distribution. (See project profile #AR6.)

The Armenian Development Agency, through the Prime Minister's office, has opportunities for U.S. investors in several cannery factories, a juice factory and the development of the electronics sector.



Azerbaijan Country Overview



BASIC FACTS:

Capital: Baku
Area: 86,600 square kilometers
Population: 7.57 million (1997)
Currency: Manat
Exchange Rate: \$1 = 3,887 (3/99)
GNP: \$3.9 billion (1997)
GDP Growth: 1.3% (1996); 5.8% (1997);
6.7% (1998 prel.)
GDP per capita: \$509 (1997)
Inflation: 3.9% (1998)

EXECUTIVE SUMMARY

Azerbaijan lies to the west of the Caspian Sea, and is strategically located between Russia to the north and Iran to the south. The country is one of the oldest oil exporters in the world and used to service much of the former Soviet Union with tools and equipment for the oil and gas industry. It also has fertile agricultural land and a well-educated labor force. With a cease-fire agreement with Armenia over the disputed Nagorno-Karabakh region now in its fifth year, prospects look quite good for a sustained period of economic growth and development.

Despite the recent fall in world oil prices, with oil reserves estimated at 4.0 billion barrels, the potential medium-term economic benefits from further development of oil and gas in Azerbaijan are very large. Over the next 10 years, the United States Commerce Department has projected that total investment in Azerbaijan's oil and gas sector could reach \$23 billion. Realization of this potential will require the establishment of a framework for development rights to offshore oil among the states bordering the Caspian Sea, as well as transport rights through neighboring countries and the construction of new export pipelines. Outside of oil exploration and production, the strongest prospects for U.S. businesses are in transportation (pipelines, railroads, highways, ports); telecommunications; agriculture; and the environment (via a World Bank program).

Future Opportunities

- Telecommunications
- Water/wastewater treatment
- Oil & Gas Tools
- Environment
- Ports
- Railroads

Realization of these opportunities has been assisted by the implementation of market-oriented legal and institutional reforms. As in other countries in the region, Azerbaijan has gone from a period of severe economic contraction during the early 1990s to a period of positive GDP growth rates (estimated at 6.7% in 1998). During this transition, the Government has been able to reduce inflation from more than 1,600% to less than 4% last year. Privatization has resulted in 90% of the agricultural land and most small businesses being transferred to private ownership. A number of laws are in place that protect foreign investment and allow for repatriation of profits and convertibility of currency. To date, 14 production sharing agreements (PSAs) have been signed with foreign oil companies, resulting in \$1.6 billion in investment.

Azerbaijan's ability to achieve its full potential will depend on establishing the rule-of-law, through resolution of conflicting laws or administrative decrees and ensuring the transparency and consistency of enforcement among all state bodies. Government licensing and regulatory practices in particular are characterized by overly broad discretionary authority and a lack of transparency in enforcement. While the giving or accepting of a bribe is a criminal act, corruption is still a major problem facing investors in Azerbaijan.

The condition of Azerbaijan's public infrastructure, representing one of the most pressing constraints to successful development of the oil and gas industry, is also an area that represents good opportunities for U.S. companies. Since independence there has been almost no public investment or maintenance of public infrastructure. Roads are inadequate and deteriorating. The electrical generation and distribution system is in poor condition. Eighty percent of arable land is irrigated, but the irrigation system is collapsing. In an effort to address these issues, the World Bank and other donors are developing programs which will result in significant investments in the short term.

ECONOMIC OUTLOOK

In the medium term, Azerbaijan's economic prospects are strong. They could be enhanced further by continued progress in economic and political liberalization, and the construction of necessary pipeline and other transport links to international markets. The Government of Azerbaijan will need to continue implementing a serious economic reform program, and wisely invest the revenue generated by the development of its energy resources, for this to occur.

Development of Azerbaijan's substantial oil and gas resources will depend on its ability to attract foreign investment, which in turn depends in part on making continued progress in economic and institutional reform. The GOAZ has made good progress in improving its external sector balances. The current account deficit of \$915 million in 1997 was financed mainly through foreign direct investment (FDI) inflows of about \$1 billion, mostly related to oil exploration and development. Official foreign exchange reserves by end-1997 had risen to four months worth of imports, compared to almost non-existent reserves in 1994. Preliminary figures for 1998 indicate that FDI continued to increase, although the current account deficit rose faster. The exchange rate has remained steady and there was no discernible premium in the black market as of early 1999.

The Government's structural reforms have also made considerable headway. Both domestic and foreign trade regimes have been substantially liberalized with the abolition of the state order system, export and import quotas, licensing requirements and the export registration scheme. External tariffs have been simplified with reduced dispersion. There are three tariff rates (i) 1.5 percent for most items, (ii) 5 percent for intermediate goods, and (iii) zero for investment goods. State-owned trading companies involved both in exports and imports, including the cotton monopoly, have been either privatized or liquidated.

A privatization program providing for the sale of two-thirds of state assets in the productive sector has proceeded at a quick pace. About 13,000 small enterprises have been sold through cash auctions, while more than 500 medium-scale enterprises have been privatized through voucher auctions. About 95 percent of the population has received vouchers which can be used to purchase shares in the privatized enterprises. A key aspect of the Government's reform program is land reform and restructuring. In early 1995, it introduced laws on agrarian reform and reform of state and collective farms. The July 1996 Land Reform Law has facilitated the transfer of land to private and collective ownership. Land titling and land registration systems have been put into place

In the near term, the GOAZ will most likely continue to face a difficult situation concerning its finances. Despite Azerbaijan's oil wealth, the actual flow of revenues from oil will be limited during the next five years. This is true in part because of the fall in world oil prices in mid-1998, but also because of the nature of production sharing arrangements (PSAs), which may require 7 – 8 years to achieve "zero balance," or investment payoff, during which time royalties are typically circumscribed. Nonetheless, the most viable strategy for Azerbaijan over the medium term will be to continue to adopt measures to attract foreign investment to develop its oil and gas reserves. It is projected that through the promotion of production sharing agreements with the GOAZ, foreign companies will be able to help Azerbaijan increase its oil production to between 1.5 and 2 million barrels per day between 2010 and 2015.

BUSINESS AND INVESTMENT CLIMATE

As in other countries in the Caspian Sea region, the GOAZ's official policy is to promote foreign investment. In 1992 the GOAZ passed the Law on Protection of Foreign Investments, which establishes the basic principles of foreign investment in Azerbaijan and extends guarantees of legal protection to foreign investors. Contract enforceability is also guaranteed; any subsequent legislation which may change the status of the contract is not retroactive. Foreign participation is possible through joint ventures with local companies, wholly foreign-owned enterprises, and representative offices. Participation of foreign investors in certain areas, such as the energy sector, requires prior approval of the Cabinet of Ministers (and in some cases, President Aliyev).

According to the privatization law passed on September 29, 1995, foreign investors may participate in Azerbaijan's mass privatization by acquisition of state privatization options. On July 16, 1996, Azerbaijan's parliament passed a land law, which allows for private ownership of land (90% of the farmland is in private hands), but precludes

ownership of land by individual foreigners. However, experts believe that the new law will enable companies owned by foreigners to own land in Azerbaijan. Finally, there are no restrictions on converting or transferring funds; nor are there any restrictions on the remittances of profits.

Despite the above positive developments and legal assurances, there still remain a number of constraints which affect both Azerbaijan and the region in general. Poorly defined and/or vague laws often only take on meaning through implementing decrees and regulations — some of which are not published. There are often differences between policies established by the GOAZ and procedures followed by executive agencies. Also, there can be a lack of co-ordination among Parliament, the various Ministries and the President's Office resulting in some laws being passed which may appear to conflict with one other. Finally, corruption is perhaps the major problem foreign investors face in Azerbaijan. Although state leaders have repeatedly proclaimed the struggle against corruption the most urgent task, the situation has not improved.

POLITICAL CLIMATE

Azerbaijan became an independent republic in December, 1991 and established diplomatic relations with the United States in early 1992. The two countries maintain close political and economic relations, and in FY98 the U.S. Government transferred more than \$60 million in assistance to Azerbaijan. A U.S.-Azerbaijan bilateral trade treaty, ratified in April 1995, is in effect. The U.S. and Azerbaijan signed a bilateral investment treaty in August 1997.

During the past several years the political climate in Azerbaijan has stabilized. Still, there remain a number of issues on which the Government is making intermittent progress. The first post-independence parliamentary election, in November 1995, was flawed, although some opposition candidates were seated. Azerbaijan's system of Government grants broad powers to the President. The presidential elections in October 1998, the major political event of 1998, were an improvement over previous elections, but still fell short by international democratic standards. Azerbaijan has taken several steps toward a more open society, including the elimination of censorship. Still, the lack of an independent court system and a scarcity of qualified lawyers makes it difficult to protect the legal rights of individuals.

A key issue that will continue to affect economic development in the country is the on-going conflict with Armenia. A cease-fire agreement with Armenia over the disputed Nagorno-Karabakh region has been in effect since May 1994, and this has clearly been a factor underpinning the return to strong economic growth in Azerbaijan.

SOURCES OF FINANCING

The Azerbaijani banking system is small, weak, and as yet plays a minimal role in the economy, which mostly functions on cash. As of July 1997, there were four state-owned banks, ninety-three private Azerbaijani banks, and six foreign-owned banks. Private banks are small and are expected to decline following the increase of minimum

capital requirements from \$600,000 to \$800,000. Some of the stronger ones service foreign companies and have correspondent relationships with U.S. banks. These include Rabitobank and Demiryol Bank.

Most western businesses use one of two banks for their local transactions — International Bank of Azerbaijan, the healthiest state-owned bank, or British Bank of the Middle East's Baku branch, a subsidiary of the HSBC Group. Both of these have correspondent relationships with U.S. banks. Western businesses generally use local banks only for local payments. Of the four state-owned banks, only International Bank is a fully-functioning commercial bank, while the other three are insolvent and going through a World Bank-designed restructuring program.

As regards U.S. Government financial institutions, Ex-Im Bank has signed a limited Project Incentive Agreement with Azerbaijan, and makes short- and medium-term loans. OPIC is operative but has not made investments in Azerbaijan to date.

SECTORAL OVERVIEWS

OIL AND GAS

Caspian Sea oil production and transport remains expensive relative to other sites, a critical consideration given the current soft price of oil and the consolidation that is engulfing the oil industry worldwide. This, in addition to disappointing early results from offshore oil exploration, has tended to reduce the attractiveness of the Caspian Sea relative to other oil and gas exploration and development sites around the world.

Nonetheless, good prospects remain in the region even in the near term, including enhanced exploitation of already-productive oil fields and transportation of natural gas to regional markets. American companies can do very well in both types of project, as illustrated by the project profiles highlighted below and in the Regional Overview (see "Trans-Caspian Pipeline"). Over the medium term, the Caspian Sea is likely to be an attractive site for exploration and development, and this will entail opportunities as well for the oil services industry.

- *Chirag - Azeri Deepwater Guneshli Offshore Field.* The IFC and the EBRD have recently placed \$400 million in long-term financing on the table to develop the Chirag - Azeri Deepwater Guneshli offshore field. The most likely project configuration at this time appears to be one new platform at Chirag and a shadow pipeline to augment the capacity of the Baku-Supsa pipeline. AIOC's upgraded Chirag platform produces 100,000 barrels per day. An additional platform would bring capacity to between 200,000 and 250,000 barrels per day. An additional pipeline following AIOC's current pipeline route to Supsa, Georgia would bring transport capacity from 10,000 barrels per day to 200,000 - 250,000 barrels per day. The primary source of financing of this estimated \$1.1 billion project would be the AIOC, which upgraded the Russian-built Chirag platform and built the original Baku-Supsa pipeline. American suppliers will be very competitive regarding the offshore platform and related equipment. (See project profile #RE5.)

- *Oil and Gas Tool Manufacturing.* Azerbaijan was the largest manufacturer of tools and equipment for the oil and gas industry in the former Soviet Union, and continues to manufacture more than 80 types of tools and machines to Soviet standards. An infusion of modern management and manufacturing technologies would be required to bring this industry to international standards. Interested foreign companies are encouraged to enter into Revenue Sharing Agreements (RSAs) to manufacture one or more tools and/or machines. The RSAs will enjoy similar operating privileges (with respect to taxes and profit repatriation) as now are enjoyed by the consortia that currently hold oil and gas Production Sharing Arrangements (PSAs). There are potentially 5-6 viable interest opportunities, and start-up investment costs for each one would range from \$10 - \$15 million. (See project profile #AZ1.)

AGRICULTURE

Azerbaijan has great potential as a supplier of fruits and vegetables, particularly in the former Soviet Union. The demand for agricultural equipment and investments will steadily increase as land reform and other modernization of the agricultural sector takes place. The World Bank has instituted a credit line to improve Azerbaijan's agricultural productivity as illustrated in the following project summary.

- *Agricultural Development and Credit.* This project represents phase one of an assistance program designed to increase rural incomes and agricultural productivity. The project's objectives are: (a) to create land markets; (b) to develop sustainable rural advisory and information services; and (c) to build a viable rural financial system. The project is estimated to cost \$35 million, financed in large part by the IDA of the World Bank, and will be implemented over a four-year period. (See project profile #AZ7.)

TRANSPORTATION

Over the next few years, there will be a significant need to improve the public infrastructure and transportation systems in Azerbaijan. The development of the oil and gas industry will require improved port facilities and railroad upgrades. For improved access of all goods, it will be necessary to upgrade the main highway between Azerbaijan and Georgia.

- *Baku Port Facilities.* A \$44 million project, funded in part by an EBRD loan of \$30 million, would rehabilitate the port facilities at Baku to ensure its autonomous and profitable status. Trade facilitation will be improved by increasing the efficiency of the port and Caspian Shipping Company, reviewing legal and regulatory networks and removing trade barriers. This project is complemented by another designed to rehabilitate the port facilities at the oil reception port north of Baku on the Absheron Peninsula. The existing slips can offload approximately 10 million tons per year. Rehabilitation would increase port capacity to 20 million tons (150 million barrels) per year and cost an estimated \$25 million. (See project profile #AZ2.)

- *Highway Rehabilitation/Reconstruction.* This \$85 million project consists of reconstructing and rehabilitating the existing main highway connecting Baku with the Georgia border near Tblisi in order to improve access and lower transport costs for goods flowing into and out of Azerbaijan. Project funds will also be used to support equipment procurement and provide for technical assistance consulting services. (See project profile #RE11.)
- *Railroad Upgrade.* Increased demand for rail traffic in support of the oil and gas industry requires immediate upgrading of selected portions of the railroad track between Baku and the Georgia border. The EBRD, together with TACIS and the Government of Azerbaijan, will provide \$36 million to rehabilitate some of the worst sections, where safe passage speeds have been reduced to 25 km. per hour. (See project profiles #RE8 and AZ4.)

TELECOMMUNICATIONS

Azerbaijan has rapidly expanding telecommunications needs, including the development of internet access, offering good opportunities for U.S. companies. The growing number of foreign companies established in Azerbaijan represent a high-value demand for such services.

- *Telephone System Improvements.* The Azerbaijan Ministry of Communications plans to expand and modernize its entire telecommunications network, anticipating that funding will come from local internal sources, foreign investment and credits. Partial foreign ownership of joint ventures in some market sectors will be encouraged. One possible constraint to investors is that the Ministry would like to retain full control and revenue from long distance calling services. (See project profile #AZ6.)

ENVIRONMENT


Azerbaijan faces serious pollution problems on the Absheron Peninsula. In addition, the consortia involved in on-shore oil development will need anti-pollution equipment.

- *Urgent Environmental Investment Project.* As part of a \$25 million environmental investment project, funded in part by a \$20 million concessional World Bank loan, a \$5.1 million pilot activity will test cleanup methods and mitigate existing pollution in one offshore oilfield of the Absheron peninsula. A second activity, costing \$8.1 million, will decontaminate one area which is currently heavily polluted by mercury in a chlor-alkaline production plant in Sumgait city, also located on the Absheron Peninsula. An additional component will strengthen the Azerbaijani environmental management system at a cost of \$1.4 million. (See project profile #AZ8.)


WATER AND SEWERAGE SERVICES

Development of Baku and surrounding areas is severely constrained by lack of adequate municipal infrastructure, including water and sewerage services.

- *Baku Water and Sewerage Rehabilitation.* The Baku water and sewerage utility now suffers from over 70 percent loss of its water supply. The World Bank and EBRD have initiated an \$80 million project to rehabilitate and upgrade the utility, but the World Bank and the Government of Azerbaijan are already planning a Phase II that will carry on the work at a cost of not less than \$40 million. Build-Operate-Transfer schemes are under consideration; a conference will be held in Baku in June to explore the role of the private sector in operating and managing water and sewerage services. (See project profile #AZ5.)



Georgia Country Overview





BASIC FACTS:

Capital: Tbilisi
Area: 69,700 square kilometers
Population: 5.4 million
Currency: Lari (GEL); 1 lari = 100 tetri
Exchange Rate: \$1 = 2.2 lari
GDP: est. \$5.9 billion (1998)
GDP Growth: 10.5% (1996); 11 % (1997); 2.9 % (1998)
GDP per capita: est. \$1,071 (1998)
Inflation: est. 4% (1998)

EXECUTIVE SUMMARY

Georgia was one of the first Republics of the Former Soviet Union to declare independence. It has a population of 5.4 million and an area of 69,700 square kilometers (slightly larger than South Carolina). The country is bounded by the Black Sea to the west; the High Caucasus Mountain Range and Russia to the north; Turkey and Armenia to the south; and Azerbaijan to the east. Due to its strategic location, particularly its ports on the Black Sea, Georgia remains a gateway for land transportation across the Caucasus. It remains a pivotal country with regard to the development and expansion of oil and gas transportation routes originating from Kazakhstan, Azerbaijan and Turkmenistan. Georgia's rich land produces a variety of high-value agricultural products, and its pleasant climate, varied topography and rich history and culture make it well suited to the revival of tourism in the country.

- Future Opportunities**
- Hotels
 - Oil Refineries
 - Ports
 - Power Generation
 - Water Supply
 - Roads
 - Railroads

After several years of civil strife and political unrest in the early 1990s, Georgia has made significant progress toward achieving political and economic stability in the last few years. The crisis in Russia, however, has hit hard in Georgia as well. Under an agreement with the IMF and World Bank, Georgia had established one of the region's more stable currencies; significantly reduced its budget deficit; and generated real GDP growth rates of more than 10% in 1996 and 1997.

While growth slipped to 2.9 percent in 1998, Georgia sold off about half its foreign exchange reserves to protect the value of the lari. Even so, the value of the lari fell from 1.34 to 2.2 against the U.S. Dollar in 1998. The IMF suspended its program disbursements in the fall of 1998, largely due to below-target Government revenues and foreign exchange interventions. The Government of Georgia stopped the interventions in December, and has allowed the lari to float since then. The next IMF mission to Georgia is due in May. It will review Georgia's performance in increasing revenues and consider resuming its program lending to Georgia. Privatization has taken on an even greater urgency in the Government's macroeconomic reform program. More than 10,000 small enterprises and 1,100 medium/large firms have been privatized. The entire power sector has been targeted for privatization by President Shevardnaze. In the last months of 1998, the proceeds from privatization went to support current expenditures.

Over the next few years, there should be significant foreign direct investment as Merrill Lynch handles the privatization of the power sector through international tenders (see project profile). AIOC has completed the first oil pipeline from Baku to Supsa, a Georgian port on the Black Sea. The first loaded oil tanker put to sea from Supsa in early April. The terminal was commissioned on April 17. The urgency to build new pipelines has been greatly diminished owing to the uncertainty surrounding the direction of oil prices.

ECONOMIC OUTLOOK

The stabilization program implemented by the Government beginning in 1994/1995 resulted in some positive economic trends. A key element of the stabilization program was a dramatic fiscal adjustment, which reduced the budget deficit from 26% of GDP in 1993 to 4% in 1997. However, due to the loss of the Russian market, tax revenues missed their target and the budget deficit most likely increased in 1998. The Government significantly reduced inflation from 64% in the first three quarters of 1994 to about 7% in 1997 and 4% in 1998. Successful stabilization also laid the groundwork for introduction of a new national currency, the lari, in September 1995. The population converted U.S. \$50 million of foreign currency within a month, leading to a four-fold increase of domestic currency in circulation and growth in the international reserves of the central bank.

Since Russia is Georgia's main export market, the Russian crisis increased the country's current account deficit from \$347 million in 1997 to \$500 million in 1998. The value of the lari actually rose against the Russian ruble, further weakening the competitiveness of Georgia's products there. The current account deficit is now approaching 9% of GDP.

Following several years of severe contraction, Georgia's economic growth resumed in 1995 when real GDP rose by 2.4%, followed by a robust growth rate of 10.5% in 1996 and 11% in 1997. Again, due in part to the Russian crisis and the worst drought in 50 years, growth slowed to 2.9% in 1998. Growth continues to be led by agriculture and the service sector, particularly transport and retail trade. In addition, the sharp reduction of the labor force in state enterprises (over 35% cut since 1991) shows that the Government remains committed to developing a privately dominated market economy.

Despite these successes, the economic situation remains fragile. One of the main sources of fragility is the weak state of public finance. There is still the need, identified by the IMF and included in the Government 1998 reform program, to vigorously pursue measures to increase tax revenues, and to continue downsizing the public sector to further improve efficiency of public spending. Moreover, many key reforms are still at an early stage. Privatization of medium and large enterprises has begun, but some firms have yet to make the critical adjustment to market signals. The development of agriculture remains constrained by the lack of well defined property rights and incomplete land reform. In addition, with all banks small by Western standards, and several of them insolvent, the banking sector fails to intermediate savings into investment efficiently. The Russian crisis has not helped the Government's fiscal position, though it has strengthened its commitment to privatization.

Increased privatization likely will result in more foreign direct investment. Investment is expected to rise to 14% of GDP in 1998. Public investment will be directed primarily at rehabilitating and rebuilding the physical infrastructure – e.g., railways, power, roads, port facilities -- needed to support private sector development. Exports will continue to suffer due to slack demand from Russian markets. Combined with the large increase in imports associated with rebuilding the country's infrastructure, the current account deficit likely will increase again in 1999. Economic growth is expected to continue in 1999, building on the recovery of the agriculture and service sectors observed during 1996-97. The recovery in agriculture will in part depend on whether there is sufficient rainfall.

BUSINESS AND INVESTMENT CLIMATE

The business and investment climate in Georgia has improved over the past several years, but lack of transparency in the tax and customs systems means significant barriers to new business development remain. Still, Georgia seems to have chosen to embrace open markets and the rule of law as a path to economic growth. With the passage of a Law on Promotion and Guarantees of Investment Activity (November, 1996) and the Law on Entrepreneurship, foreign investors now face more automatic and improved registration procedures. Under these laws, there is no discrimination between foreign and local investors in those sectors where foreigners are allowed to invest. Georgian legislation does not require foreign investors to re-invest profits locally. Also, the Law on Promotion and Guarantees of Investment Activity does not impose any extra duties for profit or capital repatriation from Georgia.

The laws allow unlimited foreign ownership in some sectors, but sharply limit foreign investment in some infrastructure. Property, including land, can be gained through acquisitions, mergers, takeovers, and Greenfield investments. Individual foreigners may not own land, but a foreign-controlled firm may purchase land. While the laws on this topic are evolving, the Government must retain a controlling block of shares in roads, and railways. The Government has agreed in principle to privatize Poti port (see project profiles), and allows foreign investors to own 75% of power facilities (see project profiles). The Law on Promotion and Guarantees of Investment Activity prohibits foreign investment in the defense and security sectors.

Although the business environment is improving, it remains burdened by Government influence and bureaucracy. Personal contacts play a very significant role in the successful establishment of a business. Moreover, key people shift in and out of Government, which can drastically alter a business's operating environment. Georgian and foreign businesspeople routinely cite official corruption as a serious impediment to the conduct of business. The Government is currently undertaking a 6-month intensive program to implement measures against corruption, but substantial law enforcement and civil service reform will be necessary to wage an effective anticorruption effort. The prosecutor's office and the ministries of internal affairs and state security have anticorruption responsibilities, although these institutions have come under criticism for the ineffectiveness of their efforts, and alternatives are under active consideration. While official corruption severely frustrates foreign investors and significantly complicates future investment, the business climate in Georgia is perhaps more promising than elsewhere in the former Soviet Union. Although the legal framework for private business is in place, the enforceability of contracts is weak because there does not exist a strong, independent court system. Nonetheless, significant judicial reforms are underway. Judges who passed the recent qualification exam are slated to be seated on the bench in May 1999, when other significant reforms will also enter into effect.

In order to accelerate the pace of reform, the international community is working in close harmony with the Government of Georgia on a series of initiatives designed to enhance its ability to combat corruption and protect its borders. The U.S. in particular is providing assistance to the Georgian border guard service and other law enforcement agencies, and is promoting reforms in the judiciary and in administrative laws.

Another constraint posed to foreign investment is the dilapidated infrastructure. Foreign investors have to supply back-up electricity generation capacity to ensure that their businesses can function without interruption. This adds large costs to doing business. Speeding the privatization of the power sector should help alleviate this problem.

POLITICAL CLIMATE

After significant unrest and decline in the early 1990s, Georgia has made tremendous progress toward achieving political and economic stability, particularly over the past three years. It now stands as one of the best examples in the Former Soviet Union of a country's conversion to a democratic and free market system. President Shevardnadze's reelection in November 1995, together with his Citizens Union party's gaining power in Parliament, reaffirmed the reformist, democratic character of Georgian politics. Separatist conflicts flared up in the early 1990s in Abkhazia and South Ossetia. While the latter has been largely dormant for over three years, the Abkhazia issue remains unresolved, with Russian "peacekeepers" and a UN Observer Mission deployed there. These conflicts have disrupted transport links to Georgia's traditional markets in Russia, and policing activities continue to place a drain on the budget. The small Black Sea province of Adjara remains semi-autonomous. Throughout the rest of the country, the violence and organized crime of the early 1990s has been sharply reduced, with law and order established.

The Government party will be challenged in the Parliamentary elections next November from opposition parties, who criticize the Government for wage and pension arrears, failure to control corruption, and lack of public services.

SOURCES OF FINANCING

The banking system is in an early stage of development. As a result of strict commercial-bank oversight by the Georgia National Bank (GNB, the central bank of Georgia), the number of banks has declined from 247 in 1995 to around 70, and is still falling. There are now three large commercial banks with assets totaling U.S. \$133.7 million (54 percent of total commercial bank assets). All three banks are privatized, former state-owned commercial banks.

Foreign investors have a right to hold foreign currency accounts with authorized banks. Any amount of lari generated by foreign investors can be sold for hard currency through interbank auction at a legal market-clearing rate, or converted in banks that have a hard currency operation license. Foreign exchange is also available on the local market. Georgian law does not limit the free flow of financial resources. But in practice, the flow is restrained because of poor and unreliable interbank communication (regular banking transactions within Georgia can take several days).

Most banks issue 3-6 month credits, which are used for commercial operations. The interest rate is 5-8 percent per month. Some of the larger banks currently pay around 12 percent annually on U.S. dollar deposits, while the effective rate charged borrowers can reach 48 percent annually on U.S. dollar loans. The laws allowing banks to take possession of collateral remain weak and difficult to enforce. The European Partnership Fund, IBRD, and EBRD, plan to issue special purpose six-month credits at 11 percent interest and one-year credits at 14 percent.

SECTOR OVERVIEWS

POWER

With support of the international donor community, the Government of Georgia is restructuring the nation's power sector. In the electricity subsector, the Government has unbundled transmission, generation and distribution into separate enterprises and organizations. Nineteen smaller hydro power plants totaling 90 MW were privatized before a mass privatization process began in 1995, and four hydro power plants totaling about 180 MW have been leased to private operators. Most of Georgia's remaining hydro and thermal generation units have been transformed into joint stock companies with 100 percent of the shares owned and operated by Sakenergo-Generation. The distribution enterprises have also been transformed into joint stock companies, with 100 percent of the shares controlled by the relevant local municipalities.

The Government has selected Merrill Lynch to conduct the international tendering for the assets. Merrill Lynch sold a 75 percent interest in Telasi, the Tbilisi Distribution Company, to AES Corporation, a U.S. company. Merrill Lynch is now preparing to bundle Georgia's hydro and thermal generation facilities and sell the bundles. Bidders will be able to buy up to 75 percent interest from the Government in the bundled facilities, or bid on 25 – 30 year management contracts. (See project profile #GR2.)

The two best opportunities for future U.S. business in the power sector will be in hydroelectric power and the privatization of electricity distribution and generation. In both these areas, there is a strong need for modernization and refurbishment. Nearly 60 percent of Georgia's installed capacity is hydroelectric. Hydroelectric power is the main source of electricity during the summer. In the winter, thermal power stations account for half of the total power generated, while hydro and power imported from Armenia accounts for the rest. Thermal power stations are used only when needed because Georgia must purchase the natural gas to run them. The electricity generation sector is hindered by old plant and equipment; shortage of spare parts and fuel; and lack of maintenance funding.

Hydroelectric Power: There are more than 50 hydropower stations in Georgia, of which the 5 largest represent 70% of total capacity. The biggest hydropower plant, Enguri, is equipped with five units, with a total installed capacity of 1,270 MW. Due to mechanical problems, only four units are operable. The EBRD is financing repairs to Enguri and assistance with privatization. (See project profile #GR3.)

Privatization of Electricity Distribution and Generation: According to some estimates by USAID, the rehabilitation costs for the power generation sector exceed \$250 million and more than \$200 million is needed for the rehabilitation of the distribution sector. The World Bank has financed much of the power sector rehabilitation. With the privatization program in high gear, there are opportunities first for investors, and then for equipment suppliers to help the new owners upgrade the facilities. (See project profile #GR2.)

TRANSPORTATION

Since independence, Georgia has sought to establish itself as the crucial link in a land corridor between Europe and Asia. It recognizes and hopes to provide the transit facilities for oil and gas pipelines from Central Asia and for container transit traffic for trade between Europe, Central and Eastern Asia and the Persian Gulf. Through the development of its rail lines and ports, Georgia expects to benefit from increased investment and the development of ancillary domestic activities.

Georgia will need to address a number of pressing needs: eroding asset base; lack of technical innovation and upgrading; and general lack of resources for rehabilitation and maintenance.

Poti is on the Black Sea and now represents Georgia's primary port. The Black Sea port of Batumi lies within the semi-autonomous province of Adjara, while the port of Sukhumi is located in the separatist region of Abkhazia. The oil pipeline terminus at Supsa currently has no facilities to handle non-oil cargoes. While there is much potential at Poti, only Sea-Land Corporation has had success in developing new or refurbished facilities (see project profile #s GR4 and 5). The Georgian Pipeline

Company (owned by the AIOC) manages the oil pipeline, but it ends in Supsa, and the infrastructure there to get the oil out to the tankers relies on a Single Point Mooring (see Caspian Region project profiles).

The current road and rail links from the Caspian through Georgia to the Black sea are in need of upgrading, and such projects are receiving a high priority by the Government of Georgia. (see Caspian Region project profiles). While the Government has yet to secure donor financing to upgrade the road link to the Black Sea at Poti, the project is likely to cost about \$62 million, and represents \$8 million in U.S. opportunities for equipment exports and construction supervision. The road link from Tbilisi to Armenia for the Azerbaijan-Georgia-Armenia-Turkey highway is likely to cost \$37 million and represents \$5 million in U.S. opportunities for equipment exports and construction supervision. Once there is peace in the region between Armenia and Azerbaijan, the blockades of Armenia by Turkey and Azerbaijan will be removed, and upgrading this road will be a spur to regional economic development.

The EBRD is loaning the Government of Georgia \$20 million to improve the rail link between the Azeri-Georgian border and Georgian ports. The loan will go in large part to help bring about institutional changes at Sakartvelo Rkingza, the Georgian Railway Company. The project will help commercialize the Transcaucasus route and put the company on a more independent, commercial footing. More investments will be needed to bring the tracks up to modern standards. (See project profile #RE9.)

UTILITIES

The World Bank is partially financing a \$300 million project to rehabilitate the Tbilisi Water and Sewer System. The project is investing in urgently needed improvements, securing a private sector operator under contract to the water authority, and establishing and managing a fund to use on prioritized repairs and maintenance. The project represents at least \$10 - \$20 million in procurement opportunities for U.S. firms and the possibility of a management contract for an interested U.S. water utility or water engineering company. (See project profile #GR6.)

TOURISM

Georgia represents some good opportunities for tourism development in the near future. In the Soviet era, Georgia was a major destination for tourists from the Soviet Union and Eastern Europe. A TDA feasibility study recently completed by Radisson Hotels shows that there is an excess demand for business tourists in Tbilisi. A price analysis of rooms available shows an inordinately high range of \$120 for basic rooms that guarantee hot showers and regular power supply to more than \$300 for a five star accommodation. To serve the immediate needs of business tourists, investors could establish a Greenfield operation, or retrofit an existing property in Tbilisi to serve as a guest house. (See project profile #GR7.)

OIL AND GAS

Georgia is well situated to be an oil transit center. In March 1996, Georgia signed a 30-year agreement with Azerbaijan to pump a portion of AIOC's "early oil" along the western route to the Georgian Black Sea Port of Supsa. The Georgian Pipeline Company (GPC, a totally owned subsidiary of AIOC) has recently completed a crude oil pipeline from Sangachal, Azerbaijan (near Baku), across Georgia to Supsa. The GPC will need to procure maintenance equipment estimated at \$1 million to \$2 million per year to keep the pipeline operational. This may represent an export opportunity for U.S. firms. (See project profile #RE6.)

Projects that have been mentioned as candidates for future pipeline routes and projects include:

Baku-Ceyhan Main Export Pipeline Route: Would take crude oil to a transshipment point on the Mediterranean Sea, avoiding the Bosphorous. (See project profile #RE3.)

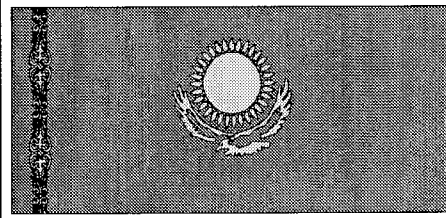
Poti to Odessa, Ukraine: Ukraine has set up a pilot project to ship oil via rail across Georgia to Poti and then via oil tanker across the Black Sea to the Ukrainian port of Odessa, where an oil terminal is under construction. This project could result in up to 20,000 bbl/day in traffic.

Kazakhstan to Batumi: The volume of this oil traffic is currently running at about 25,000 barrels per day. The oil is shipped to Azerbaijan via barge, transferred by rail to Khashuri in western Georgia before entering a pipeline for the final stage to Batumi. Under a potential new agreement, 232 kilometers of pipeline would have to be rebuilt, which could then carry 2 million tons per year.

Georgia's plans to become a transit center will depend on its ability to maintain friendly relations with its neighbors and on internal politics. Azerbaijan has complained that oil products exported from Baku are being illegally diverted to Armenia, which is under and economic blockade by Azerbaijan and Turkey.

Besides developing its role as a transit center, Georgia is also looking at ways to increase its domestic production of oil. Georgia is modernizing its refinery at Batumi. It also, with support from USTDA, is looking at the construction of an oil refinery at Supsa, south of the port of Poti. This is a termination point for the early oil pipeline from Baku to Supsa. (See project profile #GR1.)

The project at Supsa consists of the design and construction of a modularized two million tons per year oil refinery to produce a mix of products to be exported through the Black Sea and also used within Georgia or shipped to Armenia. USTDA funded a Definitional Mission in 1996 and has funded a follow-on Feasibility Study in 1997. The TDA Feasibility Study is now in progress, including an Environmental Assessment to examine air, groundwater, surface water, wetlands habitat, and coastal and marine issues.



Kazakhstan Country Overview



BASIC FACTS:

Capital: Astana
Area: 2,717,300 sq. kilometers
Population: 16.8 million
Currency: Tenge
Exchange Rate: \$1 = 84.8 Tenge
GNP: \$22.5 billion (1998 est.)
GDP Growth: -8.2% (1995); 0.5% (1996);
2% (1997); 1% (1998 est.)
GNP per capita: \$1,434 (1997)
Inflation: 9.0% (1998 est.)

EXECUTIVE SUMMARY

Kazakhstan is the second-largest land mass in the former Soviet Union (four times the size of Texas) spanning the region between China and the Caspian Sea. With proven oil reserves of 16 billion barrels, and a possible 30 billion barrels projected under the Caspian Sea, Kazakhstan's economy has been and will continue to be for some time largely dependent on the exploration and development of its natural resources – particularly oil, gas, and mineral resources. In fact, the decline in export prices for oil, gas, metals, and grain (Kazakhstan's major exports), have limited GDP growth rates and exacerbated its budget and trade deficits.

The outlook for GDP growth over the next few years is not optimistic. The economic collapse in Russia is having a strong negative effect on Kazakhstan's economy. This is likely to continue the next several years. Russia has been Kazakhstan's major trading partner, purchasing about one-third of Kazakhstan's exports. Kazakhstan has turned off the gas pipelines to Russia due to Russia's inability to pay for the gas. Exports are key to growth in the Kazakhstani economy—they represent nearly a third of the country's GDP. All of the economic constraints increase pressure on the Government of Kazakhstan to raise revenue through privatizations. This despite some recent signs that the Government wants to increase the amount of privatized assets going to Kazakh citizens.

The Government continues to promote a market-oriented policy reform program with the aim of promoting greater investment. But the pace of reform is slower than in Armenia or Georgia. Still, unlike in Georgia, Kazakhstan is able to draw on the IMF

Future Opportunities

- Airports
- Housing/Urban Development
- Water
- Power Generation
- Transportation/Highways
- Railroads

for support. In the past few years, the Government has achieved some success in stabilizing its currency and reducing inflation from an annual rate of 1,164% in 1994 down to 9.0 % in 1998. There have also been a number of laws and treaties which improve the prospects for investors including: State Support of Direct Investments; Laws on Oil and Gas; Law on Joint Stock Companies; Foreign Investment Law; a new tax code; and the U.S.-Kazakhstan Avoidance of Double Taxation Treaty.

In the past couple of years, overall production of oil has increased, thereby reversing a five year decline. A major long term goal of the Government is to promote the development of their transportation and communications sectors.

Kazakhstan's national railway (KTZ) is a large, profit-making concern. It has secured an EBRD loan to start modernizing its operations and is looking for international private sector participation (see below and project profiles).

U.S. companies have been active in Kazakhstan since 1991, particularly in the oil and gas sectors (Chevron-Kazakh Tengizchevroil Joint Venture), business services, electric energy, and mining. The more than \$1.5 billion in investments make the U.S. the largest investor in the country. This presence has and should continue to open up additional business opportunities and linkages with other U.S. companies. In addition, there is a firm commitment by the U.S. Government to support Kazakhstan and good bilateral relations which should help pave the way for future investments and exports.

This U.S. support will be particularly important since there are still some significant obstacles to doing business in the country. Some high profile investments are being disputed and several are in international arbitration, which has made investors wary. Also, the country's arbitrary implementation of key laws, lack of transparency in the tax code, along with corruption and a weak banking system have constrained business development.

ECONOMIC OUTLOOK

Kazakhstan's market-oriented economic policy program should continue to help spur economic growth rates. The pace of this growth, however, will in large part be driven by the prices of its main exports and developments in Russia, its main trading partner. Since the summer of 1997, the prices for Kazakhstan's leading exports -- oil, metals, and grain -- all have dropped, which has resulted in a significant decline in Government revenues. This drop in revenues has not been offset by increases in investment, since many investors, still concerned by the economic woes experienced in Russia and Asia, are wary of investing in Kazakhstan. Also, the opening of a new capital in Astana has increased Government expenditures, thereby increasing the overall budget deficit.

The Government is now entering the second phase of its reform program. By the end of 1997, majority shares of virtually all of the eligible small- and medium-sized enterprises had been sold, share packages in most enterprises for mass privatization had been offered, and all but a few of 2,000 state and collective farms had been privatized. Management contracts have been let for many of the largest industrial firms and many oil, gas and mineral reserves were awarded to foreign investors. The Government has begun a major Pension Reform Program which will change radically

the pension system, while increasing the security of the system and strengthening the financial and securities markets in the country.

Kazakhstan's medium- and long-term economic prospects are promising due to its vast hydrocarbon and mineral resources, low external debt obligations, and well-trained work force. New legislation on foreign investment, taxation, oil and sub-soil rights are expected to improve the climate for foreign investment. In the next several years, GDP growth will depend greatly on commodity prices, particularly the price of oil. Oil discoveries under Kazakhstan's portion of the Caspian seabed (the first exploratory well will be drilled early this spring) also will be an important factor. Major finds would spur a new surge of outside investment. However, without a return to the level of mid-1997 prices for oil (and if offshore discoveries prove disappointing), the rate of GDP growth will likely remain quite low until new export routes enable Kazakhstan to significantly boost its onshore oil production. Overall, Kazakhstan needs to diversify its economy away from a reliance on natural resources to protect itself from future shocks in oil and other commodity markets.

BUSINESS AND INVESTMENT CLIMATE

Since independence, Kazakhstan has implemented a number of broad-based reforms in an effort to move from a planned economy to a market economy, and to attract foreign investment. These reforms include: demonopolization; privatization; debt restructuring; banking reform; lifting profitability controls; price liberalization; establishing a securities and exchange commission; trade liberalization; enacting laws on investment; setting up an adequate Government procurement process; customs reform; and tax reform.

Although the Government of Kazakhstan has made great strides in improving foreign investment legislation, the vagueness of laws, contradictory legal provisions and poor implementation remain key concerns. For instance, the lack of clarity in tax laws allows for creative interpretations from the tax police and other government organs. Customs always presents challenges to foreign firms, with customs officers often interpreting customs legislation arbitrarily. Government downsizing and the move to the 'northern' capital, Astana, has seriously compounded implementation problems. It remains to be seen whether the State Committee on Investments, established in late 1996 and advertised as a "one-stop shop", has either the capacity or the will to resolve many investment issues.

An unfavorable trend has emerged, beginning in the summer of 1997 and culminating with key cabinet changes in October 1997 and April 1998: domestic investors will be given priority over foreigners in most contracts. President Nazarbayev, Prime Minister Balgimbayev, and the new cabinet have made very clear statements in recent months, complaining that previous privatizations were done too quickly and did not take into account the potential of domestic investors. In this vein, senior Government officials have warned that the Government will scrutinize major existing privatizations to determine whether the foreign investor has fulfilled its obligations. This emphasis on domestic investors could be problematic since it is uncertain whether domestic concerns have the medium-to long-term financial capacity to invest in new projects or the management and technical skills needed to rehabilitate obsolescent and debt-burdened State Owned Enterprises. Moreover, there has been a recent push for

enterprises to increase their use of Kazakhstani employees in positions often occupied by expatriate experts.

In recent years, four major pieces of legislation affecting foreign investment have been implemented by the Government of Kazakhstan. These are: (1) the Law on Foreign Investment, 1994 (amended in July 1997); (2) the Tax Code of 1995; (3) the Law on State Support for Direct Investment, 1997; and (4) the Law on Government Procurement, 1997. In addition, Kazakhstan has applied for membership in the World Trade Organization (WTO). Joining the WTO will help integrate Kazakhstan into the world economy, as well as conform its trade regime to international standards. Kazakhstan's effort to join the WTO has slowed since the resignation of former Prime Minister Kazhegeldin; Kazakhstan is unlikely to join the WTO before 2001.

POLITICAL CLIMATE

Kazakhstan is a constitutional republic with a strong presidency. President Nursultan Nazarbayev, initially elected in 1991 to a five year term, will serve in power until 2000. In August 1995 a new constitution was adopted which concentrates power in the presidency, permitting it to dominate the parliament, judiciary, and local Government. In 1997-8 the Presidential Apparat increased its influence at the expense of line ministries. Presidential elections are due in 2000, with elections to parliament scheduled to take place in 1999.

U.S. and Kazakhstan relations have been warm since Kazakhstan gained independence in 1991. The U.S. Government has provided a number of different assistance programs through USAID (\$260 million in technical assistance), Department of Defense, Department of Justice, United States Information Service, U.S. Commercial Service, U.S. Trade and Development Agency, and other groups. The U.S.- Kazakhstan Bilateral Investment Treaty is in force, as is the U.S.- Kazakhstan Treaty on the Avoidance of Double Taxation.

The major political issues affecting the business climate are: a centralization of power around the President; constant personnel and portfolio changes at senior levels of the Government; increasing Government harassment of foreign investors over concern that they are not meeting their contract obligations; and upcoming parliamentary and presidential elections in 1999 and 2000, respectively. While the Government continues to take steps to combat corruption (e.g., passage of a new criminal code, establishment of a Higher Disciplinary Council), the prosecution of senior officials is rare.

SOURCES OF FINANCING

Over the past four years, a combination of increased competition, closures, and failure to meet legislative requirements has reduced the number of banks in Kazakhstan from 184 in 1994 to 76 (as of May 1, 1998). This number should drop to 50 as the National Bank of Kazakhstan continues to enforce tougher capital requirements (\$13 million minimum by the year 2000) and the banks continue to merge. Overall capital levels of the consolidated banking sector have improved, as 51 banks, or 67 percent of

the financial institutions, have capital in excess of \$1 million, as compared with 33 banks, or 18 percent, at year-end 1994. Still, most Kazakhstani banks are undercapitalized and unable to finance major projects.

There are five main segments of the banking system: seven large domestic banks; 21 banks with foreign participation (i.e. minimum thirty per cent shareholding); four Government-owned banks; 19 remaining small Almaty-based banks; and 25 regional banks. In April of 1998 the Government's shareholding in Turan-Alem Bank was privatized. Sales of state shares in Halyk Savings Bank, one of the few remaining state-owned banks, are scheduled to occur over the next few years. Foreign banks are becoming more active; Citibank and Societe Generale established subsidiaries in Almaty in 1998.

The safest method of receiving payment for a U.S. export is through an irrevocable letter of credit (L/C) from a major Western bank. In general, importers must deposit enough funds to cover the payment before applying for a letter of credit. Local companies may apply at any one of several local commercial banks to obtain an L/C, which in most cases, according to Kazakhstani banking legislation, must be confirmed by a reputable Western bank. U.S. companies are strongly advised to re-confirm payment arrangements with the importer prior to shipping goods.

Nonetheless, Kazakhstani commercial banks are relatively inexperienced with regard to using letters of credit. Moreover, frequently Kazakhstani firms are unable to pay for products and services obtained through letters of credit.

To insure their risks in dealing with Kazakhstani partners, American businessmen are encouraged to contact the Overseas Private Investment Corporation (OPIC) in Washington. OPIC is a Government agency which provides insurance (and reinsurance) coverage against three types of political risks: currency inconvertibility; expropriation; and political violence.

At present, financing for projects in Kazakhstan is being provided mainly by the Asian Development Bank, World Bank, IFC, EBRD, USAID, OPIC, and TDA (feasibility studies). Most projects financed by international institutions, such as the World Bank or EBRD, are contracted on a tender basis. The World Bank has many projects under preparation for financing in the areas of treasury modernization, highway infrastructure, agriculture privatization, pension reform, and private enterprise support. Total financing involved in these future projects is more than \$800 million. The EBRD has recently approved financing for the reconstruction of the Aktau Port facility in western Kazakhstan. The IFC, the private sector arm of the World Bank, provides loans for small-scale projects (not exceeding \$10 million) in developing countries and emerging markets. The IFC is focusing its efforts in Kazakhstan on private sector development, and is actively analyzing small and medium-scale undertakings in the medical, agricultural (including food processing), and consumer goods sectors.

Finally, there is the Central Asian-American Enterprise Fund (CAAEF), which makes loans to small enterprises for private sector development. This U.S. Government-sponsored \$150 million fund makes equity investments, approves loans, and offers technical assistance to new private companies and entrepreneurs in the Central Asian republics.

SECTORAL OVERVIEW

POWER

The wholesale distribution and much of the retail distribution of electricity is done by the Kazakhstan Electricity Grid Operating Company (KEGOC). KEGOC's network and most of its infrastructure were built in the 1970s and have not been maintained or updated. High-priority needs include: replacing high-voltage equipment at about half of the 63 substations; and replacing the protective relaying systems at all the substations; a new dispatch control system; and institutional development and training to allow KEGOC's staff to operate the modernized system. KEGOC and the Government have already privatized three regional distribution networks: Almaty Power Consolidated (100% privately owned); Karaganda (70% privately owned); and one at Petropavlovsk which was put through bankruptcy and sold at auction. KEGOC and the Government plan to privatize at least 15 more regional retail distribution systems and possibly one generation plant that are now under KEGOC's control. In the longer term, there has been some discussion of privatizing KEGOC itself. (See project profile #KZ2.)

KEGOC is capable of raising funds on the international capital markets on reasonable terms. For a company in a transition economy, it has been rated highly by international credit rating firms. The World Bank and USAID may provide up to half of the financing needed to carry out the modernization program.

The World Bank has held discussions with a number of local companies and the Government of Kazakhstan on the possibility of establishing an initial project with a budget of \$10 million to: establish institutional frameworks for developing micro hydro power plants (MHPP); identify consumer demand for MHPP installations; construct pilot MHPPs in various regions of Kazakhstan; and prepare feasibility studies for hydro power stations. (See project profile #KZ10.)

Business opportunities exist in this area. The World Bank's Global Environmental Facility (GEF) makes grants to help construct facilities that reduce greenhouse gas emissions (i.e., by reducing the need for coal-fired electricity production) that would not otherwise be commercially viable. Typically, the GEF prefers to work with a public-private partnership to develop its projects, including MHPPs.

TRANSPORTATION

A detailed feasibility study for improvements to the Astana City Airport was completed by the Japanese Aid Program in 1998. The OECF has developed and funded a Loan Project to finance the design and reconstruction of the Astana City Airport. This \$40 million project represents \$16 million in U.S. business opportunities.

The Project includes the design and construction of improvements to the Airport runways, taxiways, parking aprons and access roads to the terminal and support facilities and a complete upgrade of the air navigation control and landing system. The Project also includes improvements to the Terminal buildings increasing the

throughput capacity of the airport to 30,000 passengers per year. The Project includes efforts to privatize the operation of the airport, terminal, air cargo and other operating facilities of the Airport. (See project profile #KZ18.)

KTZ, the railway company, had total revenues of \$1.1 billion in 1997, mainly derived from its freight activity (75%) and employs about 145,000 people. KTZ generated a profit in 1997, but suffers from liquidity problems. KTZ plans to: upgrade the tank wagon fleet; re-power 76 2TE10 locomotives; purchase 160 - 190 new diesel/electric locomotives; modernize the electric locomotive shops; modernize the diesel locomotive shop; build an automated wheel shop; modernize its central computer hardware and software; and privatize the maintenance shops. In addition, using EBRD funding, KTZ plans to: purchase modern track maintenance equipment; provide technical assistance so that the KTZ is able to conduct an open tendering process; strengthen KTZ's accounting and control skills; and improve the legal framework to increase private sector participation in the railway sector. All the rail projects represent excellent opportunities for U.S. producers of the needed equipment and for potential investors. (See project profile #sKZ14 and 15.)

The World Bank, Asian Development Bank, and Japan's aid organization (OECF) are together assembling a project to rebuild and expand the Almaty - Astana highway. As it seems now, the ADB will do the links closest to Almaty, the World Bank will finance the middle links, and the OECF will finance the links closest to Astana. The Asian Development Bank is also financing the restructuring and upgrading of the Almaty - Bishkek road. Both roads represent good business opportunities for U.S. equipment suppliers and firms specializing in design and construction supervision. (See project profile #sKZ12 and 13.)

TELECOMMUNICATIONS

Nursat is a Kazakh-American joint venture that has established the first fully digital, nationwide telecommunications network in Kazakhstan. With nodes in over 20 cities, Nursat is the leading corporate telecom solutions provider in Kazakhstan and the largest Internet service provider in Kazakhstan.

Nursat is looking to continue to roll-out its strategy of becoming the dominant second national operator in Kazakhstan through the implementation of Third Generation (3G) Wireless Local Loop (WLL) in Almaty, Kazakhstan.

The telecoms market in Almaty continues to grow dramatically with significant demand both from individuals and businesses for a "converged basket" of telecom solutions including digital fixed voice, value added voice services (e.g. voice mail, caller ID, three-way calling, etc), Internet and potentially other multimedia services. The roll-out of WLL in Almaty will in the first phase have a potential of 20,000 subscribers with the potential to make an even greater market with aggressive pricing. (See project profile #KZ19.)

URBAN DEVELOPMENT

There is strong evidence that the oil reserves in the North Caspian Sea are quite large. Test drilling will begin this spring to determine the richness of the deposits. Atyrau is the city that is to be used as the closest urban center to support the drilling activities in the North Caspian Sea. A host of private companies, donor organizations, and government units are planning to develop Atyrau into an efficient urban center to support the activities in the North Caspian. This requires major infrastructure investments as well as the construction of high-end office space and housing. As the oil companies increasingly place their staff in the city, the need for hospitals, restaurants, and other service outlets will grow rapidly. (See project profile #KZ11.)

The OKIOC Consortium, formed to explore and operate the offshore properties, has nine members: Shell/BP; British Gas; Total; Agip; Philips Petroleum; Impex; Statoil; and Mobil. They will likely divide an annual investment sum of \$5 million between the Atyrau and Mangistau Oblasts (the two Oblasts in Kazakhstan that share the Caspian coastline). In Atyrau, the two primary investments have been the sports complex and constructing 100 apartments for their employees. As the North Caspian resources are developed, their need for expatriate housing is certain to increase.

While not based on the resources of the North Caspian, Tengishevroil has already invested over \$150 million to help establish a Business Advisory Center, support for the EBRD Small Business Loan Fund, a bakery, a sports facility a hospital, an auxiliary heating system, and a school in Atyrau. They are also spending \$2.3 billion to develop three processing lines to better tap into the Tengiz field that is south and east of Atyrau. They expect to need housing for 3,000 expatriate staff over the next 5 years. The company is also constructing a new office complex.

At the oil companies' requests, USAID is expanding its activities in the Oblast. It will be providing technical assistance in improving local governance, in improving public health by building on an existing anti-TB program, and establishing a sister city program for Atyrau.

The Central Asian-American Enterprise Fund is also planning to be active in the development of Atyrau. See the financing section above. The UNDP is acting as a coordinator of development activities in the city.

OIL AND GAS

Kazakhstan is the second largest oil producer among former Soviet republics after Russia, producing over half a million barrels/day (bbl/d). Almost half of Kazakh production comes from three large onshore fields - Tengiz, Uzen, and Karachaganak. Kazakhstan has been eager to tap its production potential of over 3 million bbl/d, and Prime Minister Nurlan Balgimbayev has estimated that Kazakhstan could earn \$700 billion in revenues (including taxes) from offshore oil and gas fields over the next 40 years.

Kazakhstan has opened its resources to development by foreign companies. International oil projects have taken the form of joint ventures, production sharing agreements (PSAs), and exploration/field concessions. By far the largest of these is the Tengishevroil joint venture. In April 1993, Chevron concluded a \$20 billion joint

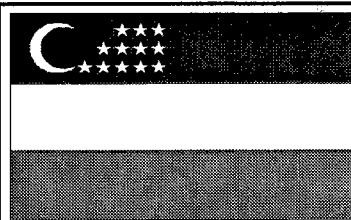
venture (Tengizchevroil) to develop the Tengiz oil field, with 6-9 billion barrels of estimated oil reserves. Current members of the joint venture are Chevron (45%), Kazakhoil (25%), Mobil (25%) and LukArco (5%; joint venture between Arco and Lukoil). Tengizchevroil exports about 170,000 bbl/d of crude oil through the Russian pipeline system; by barge and rail to the Baltic; and by ship, pipeline, and rail to the Black Sea. Given adequate export outlets, Chevron believes it can reach peak production of 750,000 b/d from the field by 2010.

Tengiz oil will be exported by the Caspian Pipeline Consortium (CPC) to world markets via a 900-mile, \$2.3 billion oil export pipeline connecting to the Russian Black Sea port of Novorosiisk (see transcaspian region profile). Construction of the pipeline is under way and the pipeline is expected to be commissioned in 2001, but it will not reach full capacity of 1.34 million bbl/d until the end of the decade. CPC members include: Russia (24%), Kazakhstan (19%), Chevron (15%), LukArco (12.5%, Russia/United States), Mobil (7.5%), Rosneft-Shell (7.5%, Russia-U.K./Netherlands), Oman (7%), BG (2%, U.K.), Agip (2%, Italy), Kazakhstan Pipeline Ventures (1.75%, Kazakhstan), and Oryx (1.75%, United States).

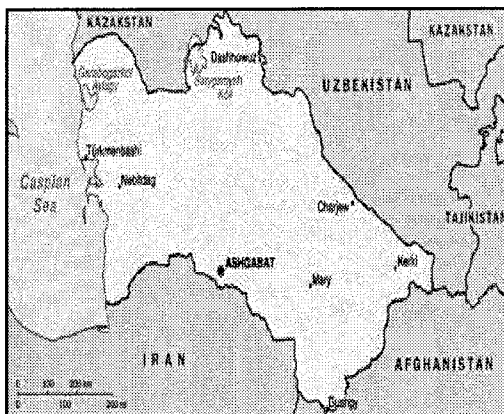
Kazakhstan needs to resolve two major issues in order for it to further increase oil production. Development of the offshore potential of Kazakhstan in the Caspian Sea has been slowed by a dispute over ownership rights. This disagreement ties in with a broader debate among Caspian Sea Region states over how the Caspian Sea should be treated under international law. In 1997, Kazakhstan signed a communique with Turkmenistan pledging to divide their sections of the Caspian along median lines; and in July 1998 Kazakhstan signed a bilateral agreement with Russia (not yet ratified) dividing the northern Caspian seabed along median lines between the two countries.

The other major issue is the development of export routes to bring Kazakhstan's oil to world markets. Under the former Soviet Union, all of Kazakhstan's oil was exported through the Russian pipeline system. Kazakhstan still views Russia as a viable export option, and the existing export pipeline to Russia may be expanded by 1999. In addition, the CPC pipeline will also pass through Russia en route to the Black Sea. Other oil export pipeline options from the Caspian Sea region are also being explored. Trans-Caspian oil pipelines could be built that would connect in Azerbaijan with other export pipelines, such as the proposed Main Export Pipeline from Baku (Azerbaijan)-Ceyhan (Turkey). (See project profile #RE3.)





Turkmenistan Country Overview



BASIC FACTS:

Capital: Ashgabat
Area: 488,100 square kilometers
Population: 5 million
Currency: Manat
Exchange Rates: \$1 = 5,200 (official, 12/30/98); \$1 = 5,350 (commercial, 12/30/98); \$1 = 17,500 (parallel, 4/1/99)
GNP: \$2.9 billion (1997)
GDP Growth: -7.74% (1996); -25.9% (1997); -1.0% (est. 1998)
GNP per capita: \$630 (1997)
Inflation: 25% (1998)

EXECUTIVE SUMMARY

The Republic of Turkmenistan lies in the southernmost part of the former Soviet Union, situated on the eastern edge of the Caspian. Desert covers 90% of its land area. Turkmenistan became independent in 1991 and has since pursued a policy of neutrality in foreign affairs. It is a single-party state led since independence by President Niyazov and his closest advisors.

The cornerstone of the Turkmeni economy is energy. With 2.9 trillion cubic meters (tcm) in proven and probable natural gas reserves, and additional indicative reserves estimated at 14 tcm, Turkmenistan is the fourth largest gas producer in the world. The country also has an estimated 1.1 billion tons of oil reserves. The nation's principal exports in 1997 were natural gas (36% of total exports), crude and refined oil (28%), and cotton fiber (12%). The principal export destinations were Russia (44% of total), Iran (16%), Ukraine (15%), and Turkey (13%).

Future Opportunities

- Agriculture
- Heavy Industries
- Ports
- Roads
- Steel Pipes

Recent economic performance in Turkmenistan has been poor, reflecting both external shocks and poor economic management. Declines in exports of natural gas (by 73%) and cotton fiber (by 52%) in 1997 caused an explosion of the trade deficit, which is estimated to have risen to 15% of GDP. The underlying fiscal position has weakened over the years, and inflation, although brought down to 20% by 1997, is estimated to have increased to an average of 25% in 1998. The official and black market exchange rates continued to diverge.

Nonetheless, with improved macroeconomic policy and acceleration of systemic economic reform, given its abundant natural resources, Turkmenistan's prospects are strong. Good opportunities present themselves currently relating to: the development of pipeline routes to transport Turkmen gas to western markets; upgrading the existing refining and power generation facilities; and exploitation of the nation's natural advantages in industrial and chemical production.

ECONOMIC OUTLOOK

Turkmenistan was initially less negatively affected by the breakup of the former Soviet Union than other republics because of its reliance on oil and gas exports. But the inability of several former Soviet republics to pay for their gas imports eventually led to serious external arrears and declining gas output. In 1994, export volumes declined sharply due to interruptions in deliveries of gas to Ukraine and Georgia, and with a worsening of the payments situation, gas exports were suspended completely in March of 1997. Although agreement was reached with Ukraine to export 20 bcm of gas in 1999, 60% of the payment will be made in equipment and other goods. Difficulties with this arrangement have already begun to appear.

Turkmenistan authorities are giving high priority to relieving their dependence on other former Soviet republics as export destinations for their natural gas. A new spur pipeline to Iran was opened in December of 1997 with annual capacity to transport 8 – 10 billion cubic meters (bcm) of gas annually. Turkmenistan hopes to export 4 bcm of gas to Iran through this pipeline in 1999. In addition, in February of 1999 President Niyazov announced an ambitious project to build a Trans-Caspian Pipeline (TCP) during the next three years that will have the capacity to export from 16 bcm to 30 bcm of gas annually to Turkey, and ultimately, to Europe.

Recent economic developments have highlighted the economy's vulnerability to external shocks. Merchandise exports fell from \$1.7 billion in 1996, to \$523 million in 1998, because of the dual effect of deep declines in exports of natural gas and cotton fiber. Turkmenistan's export destinations swung markedly away from Russia and Ukraine in 1998 because of the payment difficulties those countries were experiencing. Imports also contracted markedly, although not enough to prevent a burgeoning trade deficit. This, combined with a deterioration in the services account associated with payments to foreign companies for construction services, caused an implosion of the current account in the balance-of-payments, from a small surplus in 1996 to a \$600 million deficit in 1997. The financial crisis in Russia in 1998 contributed to further deterioration in the current account deficit, to an estimated \$650 million.

Foreign debt rose from zero in 1992 to the equivalent of 74% of GDP in 1997. By 1998 a severe liquidity crisis had emerged. The reaction of Government authorities has been to restrict currency convertibility and try to maintain an artificially strong official foreign exchange rate. The black market rate in the first quarter of 1999 was three times the official rate.

Although no figures have yet been published on budget performance in 1998, it is likely that the weakness in the economy has increased tax arrears. State-sector wages were doubled in 1998, while pensions were increased by between 50% and 100%. The cumulative effect has been that inflation, although reduced to 20% by 1997, is likely

to have increased to an average of 25% in 1998, and may be accelerating. The monthly inflation rate was 4.5% in October of 1998 (implying an annualized rate of 172%).

Given its strong natural resource base, Turkmenistan has excellent long-term development potential. However, economic reform has lagged, and recent developments have highlighted the nation's vulnerability to external shocks. Although authorities are attempting to diversify the export base by finding new markets for natural gas, the nation's economic vulnerability should also be reduced by accelerating the pace of economic reform. The immediate challenges are to adopt an effective macroeconomic stabilization program, consolidate the budget and give the central bank the independence it needs to conduct a restrained monetary policy. Over the medium term, Turkmenistan will also need to initiate comprehensive structural reform, fully liberalize prices, privatize non-strategic medium- and large-scale enterprises, and encourage economic competition.

BUSINESS AND INVESTMENT CLIMATE

Turkmenistan officially welcomes foreign investment in all areas. Since the March 1997 passage of a new law on hydrocarbon resources, the government has been actively courting large energy multinationals to participate in the development of Turkmenistan's oil and gas reserves through production sharing agreements and as minority joint venture partners. Yet it is still the case that, because the economy is still largely state-owned and controlled, most economic decisions continue to be made at the highest levels of government. The regulatory and legal foundations of a market economy are rudimentary, and discretionary official authority tends to prevail over the rule-of-law. These issues are gradually being resolved as the Government and the population become more familiar with the international norms of the world marketplace.

Turkmenistan is now announcing international tenders for competitive bids on government projects. Previously, trade contracts were granted for purely political reasons, with little regard for feasibility, economic viability, or the ability of the winning company to do the job. Despite the new policy, competition remains an alien concept to many government officials. Large-scale contracts are still signed at the presidential level and usually require a company's CEO to travel to Ashgabat to close the deal. Almost all companies investing in Turkmenistan form a joint venture with a local company. Practically all joint ventures include a government partner. Arbitrary re-negotiation of signed contracts remains a problem.

A new law concerning hydrocarbon resources, adopted in March of 1997, is intended to create better transparency in the regulation of foreign investors in the oil and gas sector. This law provides a detailed legal framework for conducting oil and gas business in Turkmenistan. Three types of licenses can be issued on the basis of tender results or direct negotiations: the exploration license, the extraction license and the single exploration and extraction license. Two types of agreements can be signed for oil production: the production sharing agreement and the joint venture agreement. A few foreign companies have already begun operations by signing production sharing agreements in the oil and gas sector before the new hydrocarbon resources law was

adopted, and the government expects more foreign oil and gas companies to be attracted by this improved regulatory framework in the near future.

The State Agency for Foreign Investment monitors all foreign investment. It reviews and clears all investment proposals and foreign currency credits proposed by Government ministries. The Investment Agency tends to give preference to the Government's "priority" projects. The Investment Agency operates in cooperation with the Turkmen State Bank for Foreign Economic Affairs, the key institution for foreign businessmen and investors.

On October 25, 1993 a bilateral trade agreement, which provides reciprocal most favored nation (MFN) status, went into effect between Turkmenistan and the United States. Discussions concerning a U.S.-Turkmenistan bilateral investment treaty are ongoing. The United States Government has also proposed a bilateral tax treaty, which would provide U.S. businesses relief from double taxation of income. In September 1993, President Niyazov signed a law on the protection of intellectual property rights, and in December 1998 the Mejlis (Parliament) adopted a new Civil Code that addressed copyright regulations, although enforcement of these decrees remains untested. The U.S.-Turkmenistan trade agreement also contains commitments on protection of intellectual property.

Foreign companies can benefit from a number of exemptions and tax holidays established for specific circumstances. Foreign companies, their branches or representative offices, and foreign individuals registered and engaged in production and/or commercial activity in Turkmenistan, are subject to a value added tax (20 percent), a profit tax (25 percent), a property tax (1 percent) as well as excise taxes for certain imported goods and products. A VAT is levied on turnover including export operations, sales of all kinds of goods and services produced by the enterprise and/or acquired elsewhere, internal sale within the enterprise, barter, and free-of-charge transfer of goods and/or sales of collateral to other legal entities. There are a number of activities defined by the Law on the VAT under which VAT is not charged. The Law on Profit Tax offers some tax relief to foreign companies provided that at least 30 percent of the authorized capital of an enterprise is in hard currency. This enterprise can then enjoy a profit tax exemption for the period of repayment of initial capital investments. Also, foreign companies functioning in free economic zones are exempt from profit tax for three years, and agriculture investment projects are also provided a profit tax holiday. Investors in the oil and gas sector must pay a 25 percent profit tax plus a negotiable royalty sum.

POLITICAL CLIMATE

Turkmenistan is a single party state led by an authoritarian President and his closest advisors. There is no Vice President or Prime Minister. According to the Constitution, the Chairman of the Mejlis assumes the presidency upon the death or permanent incapacitation of the President and then calls elections. The Mejlis is the supreme legislative body and is elected for a five year term. Its decisions generally reflect the views of the President.

The National Democratic Party, the successor to the Communist Party, is the country's only legal political party. Mr. Saparmurad Niyazov, appointed Communist Party chief

in 1985, was appointed President of the Turkmen Republic within the old Soviet Union in October 1990 when the post was created during Gorbachev's *perestroika*. Mr. Niyazov was elected President of the new Republic of Turkmenistan in a direct election on June 21, 1992 in which, unchallenged, he won 99.5 percent of the vote. In a January 1994 referendum, 99.9 percent of the electorate voted to extend Mr. Niyazov's term in office to the year 2002. The Government also conducted single-candidate elections for the 50-member, one-house Mejlis in December of 1994. The next parliamentary election is scheduled for 1999.

Turkmenistan is politically stable and has had no incidents of politically-motivated damage to projects or installations; there is no organized opposition. There are no nascent insurrections and Turkmenistan maintains friendly relations with all of its neighbors (including Iran and all parties in Afghanistan).

SOURCES OF FINANCING

The banking system in Turkmenistan consists of the State Central Bank of Turkmenistan, three state banks and 17 commercial banks. Most of the commercial banks are small- and medium-sized. There are four banks with foreign capital including the Turkish-Turkmen bank "T.C. Ziraat Bankasi," the Russian-Turkmen bank "Rossiyskiy Credit," the Pakistani-Turkmen bank and an Iranian commercial bank "Saderat." All banks, including foreign banks, must be issued a license by the Central Bank of Turkmenistan, in order to operate. Five Turkmen commercial banks, a Turkish-Turkmen joint commercial bank, and Sberbank have licenses from the Central Bank enabling them to carry out foreign exchange operations.

The State Bank for Foreign Economic Affairs (Vnesheconombank) is the key institution for foreign businessmen and investors, as well as local exporters. It dominates import/export operations and is a member of the International Payment Cards Association. The Vnesheconombank has been authorized to sign an agreement with "Standard and Poors" agency concerning awarding Turkmenistan with the international sovereign credit rate.

Turkmenistan signed an OPIC agreement in 1993 that provides for loan guarantees, direct loans and investment insurance to U.S. companies. To date, there has been little U.S. investment utilizing these facilities in Turkmenistan. The U.S. Export-Import Bank provides short- and medium-term coverage for sovereign risk transactions. Ex-Im Bank requires an irrevocable letter of credit (ILC) or guarantee from the State Bank for Foreign Economic Affairs, Vnesheconombank, for short-term transactions. Many American companies in Turkmenistan have used Ex-Im Bank funds or guarantees to finance their projects.

Domestic enterprises are supposed to have access to credits from local commercial banks, but to date these banks have made few loans. The Central Asian-American Enterprise Fund and the European Bank for Reconstruction and Development have both opened credit lines for Turkmen private enterprises.

Turkmenistan is a member of the IMF and the fund has a permanent advisor stationed in Ashgabat. Turkmenistan is also a member of the World Bank and the EBRD, both of which have development projects in the country.

SECTORAL OVERVIEW

OIL & GAS

Turkmenistan has the world's fourth largest known natural gas reserves, after Russia, the U.S. and Iran, with estimated reserves totaling 13-21 trillion cubic meters of gas. In 1992, Turkmenistan produced 84 billion cubic meters of gas, more than twice as much as was produced in 1996. Faced with limited export pipeline options and non-paying customers, gas production had fallen to 35 billion cubic meters by 1996. The nation is actively engaged in the development of alternative pipeline options for the export of its natural gas.

Turkmenistan also has significant oil resources that amount to 6 to 8 billion tons. There are two oil refineries in the country: the Turkmenbashi Refinery and the Seidi Refinery. The Turkmenbashi Refinery, where most Turkmen oil is being refined to meet domestic needs in petroleum products, is currently being reconstructed. The Seidi Refinery, which has its only oil supply pipeline coming from Siberia, is currently running at less than 50 percent of its projected capacity using local crude oil shipped by rail.

- *Trans-Caspian Pipeline (TCP).* The \$3.4 billion Trans-Caspian Pipeline (TCP) will transport natural gas 1,800 kms from the field fence in Mary, eastern Turkmenistan to Erzurum, Turkey, via Azerbaijan and Georgia. Depending on negotiation of transit rights and financing, construction could start as early as 2001 and be completed in 2004 or 2005. The exact configuration of the design is still to be determined. Most likely it will evolve in three stages, beginning with Stage I, development of the capacity to export up to 16 bcm to Turkey. Subsequent stages could augment the capacity to 30 bcm, with the residual to go to European markets. (See project profile #RE1.)
- *Turkmenbashi Steel pipe Production.* The GOT proposes to enter into a Build-Operate-Transfer (BOT) arrangement with a foreign sponsor to plan, construct, supply and assemble equipment, initiate operations, and collect repayment of its investment from the receipts of managing and operating a steel pipe production facility in Turkmenbashi, Turkmenistan. The estimated total cost of the investment is \$30 million. (See project profile #TU8.)
- *Seidi Oil Refinery Rehabilitation.* Under a 1997 Presidential decree, the GOT would like to attract foreign sponsors to rehabilitate the Seidi oil refinery at an estimated cost of \$104 million, while keeping interruptions to current production to a minimum. (See project profile #TU1.)

AGRICULTURE

Agriculture, especially cotton production, is the country's second largest source of foreign exchange earnings after the oil and gas sector. Turkmenistan used to produce as much as 1.2 million tons of cotton per year, although due to unfavorable weather

conditions, outdated equipment, lack of manpower, and key inputs, the 1996 cotton harvest dropped to 436 thousand tons. In 1998, Turkmenistan produced 707 tons of raw cotton. As a priority area of development in agriculture, the government intends to become self-sufficient in wheat production. Although Turkmenistan produces seasonal fruits, vegetables, rice, wheat and maize, it imports most of its foodstuffs. In a998, farmers met the state order for wheat production of 1.2 million tons for the first time. The food processing industry is extremely underdeveloped. A shortage of modern storage facilities aggravates existing procurement system problems in agriculture.

- *Crop Protection and Veterinary Services.* This is the first World Bank agricultural project in Turkmenistan. The \$30 million total cost is to be supported by a \$15 million World Bank loan. The project aims to support agricultural reforms by maintaining key public services, reducing losses due to pests and diseases, and supporting agricultural development. (See project profile #TU9.)

POWER

Turkmenistan is self-sufficient in electricity. Approximately 15-17 percent of electrical power produced in Turkmenistan is exported to its neighbors, often in barter arrangements. Turkmenistan has to import its electrical power equipment. The Ministry of Energy and Industry is interested in increasing the capacity and improving the efficiency of electricity production. There are significant opportunities to upgrade Turkmenistan's electrical generation plant through investment in new gas steam turbines, which would greatly improve efficiency. GE Power Group completed the first \$42 million stage of the upgrade to the Bezmein power station in November of 1998. Over the medium term Turkmenistan could increase its export earnings from electricity as its neighbors in the region become increasingly capable of paying for it in hard currency rather than barter.

- *Thermal Power Plants.* This \$700 million project deals with rehabilitation and construction of three major power plants in Turkmenistan. Project 1 calls for the construction of a combined cycle gas-fired plant in Tashauz. Project 2 deals with the reconstruction of the Mary Power Generation Plant. Project 3 is the construction of a new electrical power generation plant in Nebitdag. (See project profile #TU1.)

TRANSPORTATION

During the next few years there will be a significant need to improve the public infrastructure and transportation systems in Turkmenistan. Development of the Trans-Caspian Pipeline, in particular, will require improved port facilities and surface transport infrastructure across the country to the gas field near Mary.

- *Turkmenbashi Port.* EBRD is providing a loan of \$30 million toward a total project cost of \$42 million for the reconstruction, rehabilitation and supply of equipment to Turkmenbashi Port. The balance of the cost will be borne by the

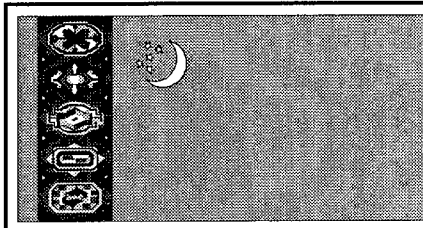
Turkmen Sea Administration (with a sovereign loan guarantee). (See project profile #TU3.)

- *Ashgabat-Mary Road Rehabilitation.* The GOT has obtained a \$50 million loan from the EBRD to support the rehabilitation of sections 1 and 2 and \$25 million from the Kuwait Fund for Arabic Development (KFAD) and the Islamic Development Bank (IsDB) to support the rehabilitation of section 3 of the main road between Ashkabat and Mary, Turkmenistan. (See project profile #TU4.)

INDUSTRIAL PRODUCTION

Turkmenistan's natural gas resources give it a competitive advantage in production of energy-intensive products such as aluminum. Turkmenistan also possesses significant mineral resources, most of which have not been widely developed. There are 10 chemical enterprises involved in the production of mineral fertilizers, iodine and bromine, carbon, sulfites, gypsum, and other minerals. Most of the facilities are in need of rehabilitation. The government considers as priority projects the upgrade and increase of iodine production, the expansion of carbomide and defoliant production, the construction of a gas chemical complex to produce polyethylene, and some other projects.

- *Mary Aluminum Plant.* This \$300-700 million project is for construction of an aluminum plant in Mary, Turkmenistan, to produce 150,000 tons of aluminum per year. TDA is financing a feasibility study being conducted by Bechtel. (See project profile #TU5.)
- *Charjou Carbomide Production Plant.* The Ministry is looking for an investor interested in constructing a \$300 million plant to produce ammonia and carbomide in Charjou, Turkmenistan. The Ministry plans to conduct tendering for a Build-Operate-Transfer contract to plan, construct, and start-up the plant and then operate it under management contract. This project is considered to be of high priority by the GOT. (See project profile #TU7.)



Uzbekistan Country Overview



BASIC FACTS:

Capital: Tashkent
Area: 447,000 square kilometers
Population: 24.3 million (1998)
Currency: Soum
Exchange Rate: \$1 = 112 (official, 2/24/99); \$1 = 410 (parallel, 2/10/99)
GNP: \$23.9 billion (1997 est.)
GDP Growth: 1.6% (1996); 2.4% (1997); est. 1.0% (1998)
GNP per capita: \$1,010 (1997)
Inflation: est. 50% (1997); est. 50% (1998)

EXECUTIVE SUMMARY

Uzbekistan has excellent long-term economic potential, because of its well-educated population and plentiful natural resources. It is the world's ninth largest producer of gold (with annual output of approximately 60 tons) and is among the ten largest suppliers of natural gas (with annual production of more than 50 billion m³). But both domestic and foreign demand for its natural gas is declining.

Progress in systemic economic reform has been slow, in accord with President Karimov's commitment to gradual economic reform. But the government's reluctance to relinquish control of key sectors of the economy remains a serious impediment to the fulfillment of Uzbekistan's long-term economic potential. Uzbekistan's move in early 1999 to begin privatizing major enterprises is a positive sign for foreign investors, but there are many other hurdles to be overcome, such as the lack of a convertible currency, before Uzbekistan can become an attractive market for foreign trade and investment.

Recent economic performance has been poor. The cotton crop failed in 1998, and world gold prices declined. Monthly inflation rates accelerated in late 1998, and inflation probably averaged more than 50% for the year. By early 1999 the parallel exchange rate for the dollar was nearly fourfold in excess of the official rate. Shortages of key imports have appeared.

Nonetheless, good project opportunities can be identified in the agricultural sector, and in public infrastructure and services, supported by international donors. And power exports may prove to be an area of comparative advantage over the medium term, if generation technologies are upgraded.

Future Opportunities

- Transportation/Roads
- Agriculture
- Health
- Thermal Power

ECONOMIC OUTLOOK

Uzbekistan has a well-educated population, and is rich in natural resources. It is the world's ninth largest producer of gold (with annual output of approximately 60 tons) and is among the ten largest suppliers of natural gas (with annual production of more than 50 billion m³). More than 20 percent of Uzbekistan's GDP is generated in agriculture, which employs about 40 percent of its labor force. Primary commodities, such as cotton fiber, mining and energy products, account for about 75 percent of its merchandise exports; cotton alone accounts for 40 percent of exports. Overuse of the rivers that feed the Aral Sea for irrigation of agricultural lands has already reduced it to two-thirds of its former size, however, and salinization of the surrounding area threatens the environmental and economic viability of the region.

Although Uzbekistan's long-term economic potential is strong, recent economic performance has been poor. In 1998 the cotton crop failed and world gold prices declined, contributing to a decline in exports estimated to have exceeded 17%. Immediately following the collapse of the Russian ruble in August of 1998 the parallel, or black-market, exchange rate depreciated significantly, but monetary authorities devalued the official rate only slightly. Instead, the Government kept the trade deficit from exploding by tightening import controls, with the result that imports declined by nearly 16%. Shortages of key imports appeared.

The price level by the end of 1998 was estimated to have risen by about 50% year-on-year, and monthly inflation figures began to accelerate by year-end, reaching 3.8% in November (implying inflation of 155% at an annualized rate). The Government's reaction has been to accommodate price rises by increasing wages in July of 1998 and again in January of 1999. By February of 1999, the parallel rate had soared to 410 Soums per dollar, as compared with an official rate of 112. The Government responded by increasing from 30% to 50% the proportion of foreign exchange earnings foreign companies were required to surrender at the official rate.

Economic growth data for the Republic of Uzbekistan are difficult to obtain, and the official Uzbek figures tend to vary greatly from data acquired from other sources. The Government claims that real GDP grew by 5.2% in 1997, while the IMF suggested that a figure of 2.4% was closer to the mark. The official GDP growth figure for 1998 is 4.4%, while the Economist Intelligence Unit reports a preliminary figure of 1.0%.

Demand for Uzbek natural gas, from both domestic heavy industry and foreign buyers, is declining. And, although no figures are available, it is likely that Uzbekneftegaz is facing large payments arrears from both its domestic and foreign customers. The Government tendered several new gas exploration projects in 1998 but received no bids.

Uzbekistan has implemented a relatively good small-scale privatization program, with 60,000 enterprises (96 percent of the total) having been privatized or leased to worker collectives since 1992. But progress in privatization of medium- and large-scale enterprises, and agricultural enterprises, has been on-again, off-again, with little real progress. In late 1998 the Government announced another ambitious program of privatization of many of its major enterprises.

BUSINESS AND INVESTMENT CLIMATE

Some of the most serious obstacles faced by foreign companies doing business in Uzbekistan center on import restrictions and currency convertibility restrictions, coupled with a recent increase in mandatory foreign exchange surrender requirements, as described in the previous section.

In addition, the Central Bank has begun sharply limiting the amount of cash Soums in circulation and to require that virtually all transactions by enterprises, with the exception of wages and travel, must be paid by interbank transfers rather than in cash. The effect has been to make even day-to-day bank operations difficult and time consuming, because interbank transfers can take anywhere from several days to several months to clear. As a result, a parallel pricing system has formed in which the price for goods in interbank transfers is running as high as three times the cash Soum price.

The overall effect of these measures on foreign trade and investment in Uzbekistan has been negative. Many major foreign companies are pulling out of or significantly reducing their activities in the Uzbek market. Over the past six months, major players such as Enron, Unocal and AIG have all substantially cut back on operations in Uzbekistan, or left altogether. Foreign direct investment (FDI) remains low; in 1997 only \$57 million, or less than \$3 per capita, entered the country as FDI. This is the lowest per capita rate in the former Soviet Union. This issue was addressed by the Government in May of 1998 when new legislation was introduced offering stronger protection for foreign investors.

The Government's policy since 1994 has been to try to encourage foreign investment through a series of presidential decrees and legislation that provides special tax breaks, guarantees and concessions to foreign investors and joint ventures with foreign investors. All of these decrees and legislation are subject to the caveat, however, that their provisions are subject to existing Uzbek legislation, which significantly limits any positive impact they may have.

Uzbek authorities remain very interested in attracting U.S. investors to participate in trade and investment projects identified by the Government as high-priority for Uzbekistan, and representatives of U.S. companies that participate in such arrangements, such as Case Corporation, report that their business relationship is quite satisfactory. The U.S.-Uzbekistan Joint Commission has established a Business Subcommittee, chaired by U.S. Ambassador Presel, to help resolve business issues.

POLITICAL CLIMATE

The Republic of Uzbekistan gained its independence on August 31, 1991 and was recognized by the United States on December 25, 1991. Uzbekistan is a member of the United Nations and the Commonwealth of Independent States (CIS). Islam Karimov was first elected President by Uzbekistan's Supreme Soviet in 1990, prior to independence, and later won a popular election in 1991. In March 1995, Mr. Karimov held a nationwide referendum to extend his presidential term until the year 2000, receiving the assent of more than 99 percent of the electorate, according to the official

count. He holds the leading post in the ruling People's Democratic Party (PDP) as well. Professing allegiance to what he terms "eastern democracy", Mr. Karimov has stressed the importance of political stability over Western-style democratic reforms.

Since 1994, the Government of Uzbekistan has taken a number of steps to improve its record in respect to human rights, including the release of political prisoners, establishment of a Government Commission for Human Rights, and permission granted to human rights and international observer offices to establish themselves in Tashkent. These efforts facilitated a warming of the U.S.-Uzbekistan bilateral relationship beginning in 1995, although reports of alleged human rights abuses continued to be filed by credible international organizations and NGOs. More recently, Uzbekistan has again come under attack by human rights organizations for the hundreds of arrests that have been made in the wake of a series of terrorist bombings in Tashkent's city center on February 16, 1999.

SOURCES OF FINANCING

The Uzbek banking system is small, weak and as yet plays a minimal role in financing investment. As of June 1998, there were 33 banks licensed for operations in Uzbekistan, all of which had licenses to conduct foreign exchange operations. While a number of foreign banks maintain offices in Uzbekistan, none of them has opened branch operations. As of 1998, the state-owned National Bank of Uzbekistan still controlled about 60 percent of all banking assets.

The IMF program in Uzbekistan has been in abeyance since 1996, limiting the extent to which international financial institutions can increase lending in support of economic development. Nonetheless the World Bank, the European Bank for Reconstruction and Development (EBRD) and the Asian Development Bank (ADB) are all active.

The following agreements and U.S. agency programs underpin the financing of U.S. business activity in Uzbekistan:

- **The Bilateral Trade Agreement.** The 1994 agreement provides for Most Favored Nation (MFN) status for products of both countries, improved market access, and non-discriminatory treatment for U.S. goods and services in Uzbekistan and for Uzbek products in the United States.
- **General System of Preferences (GSP).** Also in 1994, Uzbekistan was granted GSP status from the United States, conveying nonreciprocal tariff preferences. Through this, 4,400 semifinished products and agricultural goods were exempted from U.S. import tariffs and customs duties.
- **The Bilateral Investment Treaty.** The 1994 treaty guarantees U.S. and Uzbekistani companies the right to invest on the same terms as those accorded to domestic or third country investors. This remains to be ratified by the U.S. Senate.
- **U.S. Export-Import Bank.** The Export-Import Bank is open for short and medium term credits in Uzbekistan. Ex-Im will require an Irrevocable Letter of

Credit or guarantee from the National Bank for Foreign Economic Activity of the Republic of Uzbekistan.

- Overseas Private Investment Corporation (OPIC). The OPIC agreement which allows OPIC to offer political risk insurance and other programs to U.S. investors in Uzbekistan was concluded in 1992 and is in force. This bilateral agreement authorizes OPIC to provide loans, loan guarantees, and investment insurance to American companies that invest in Uzbekistan.
- U.S. Trade & Development Agency (TDA). TDA is authorized to operate in Uzbekistan. TDA provides funding for U.S. firms to carry out feasibility studies and conduct other planning services related to major projects.

SECTORAL OVERVIEW

AGRICULTURE

More than 20 percent of Uzbekistan's GDP is generated in agriculture, which employs about 40 of its labor force. Cotton alone accounts for 40 percent of Uzbek exports. By the same measure, lower prices and seriously diminished production in 1998 have severely hurt the country's foreign exchange earnings. Aside from commodities trading, foreign involvement in Uzbekistan's food and agricultural sector is most prevalent in harvesting equipment and in cotton, tobacco and food processing.

Case Corporation is currently exporting grain and cotton harvesting equipment. Swiss and Turkish firms have also entered into joint ventures to improve Uzbekistan's cotton milling capacity which currently extends to only 15 percent of the harvest. In the area of food processing, a number of firms including Coca-Cola have contributed sizable investments. Coca-Cola opened a new bottling plant in Tashkent in August 1998, which will produce 350 million liters a year. Coca-Cola's total investment in Uzbekistan is estimated at \$140 million over the last five years.

- *Agricultural Enterprise Restructuring.* The Agricultural Enterprise Restructuring Program (AERP) aims to increase the profitability and sustainability of Uzbek agriculture through the privatization and restructuring of farming and associated agribusiness activities. The \$41 million cost of Phase I is to be supported by a \$30 million World Bank loan. Phase I will (a) help create the enabling conditions for farm privatization and restructuring; and (b) initiate the process of farm privatization by providing the necessary support to farmers who choose to participate in the process. (See project profile #UZ7.)

POWER

Uzbekistan possesses substantial hydrocarbon resources, particularly in natural gas, where it is among the world's ten largest producers. The corollary is that it has developed a significant electrical generation plant, and is a net exporter of power.

Electric power in Uzbekistan is derived primarily from natural gas-powered thermal plants with a smaller portion coming from coal and hydroelectric facilities. Uzbekistan currently possesses 11,000 MW in electrical generating capacity with plans for an additional 4,000 MW through rehabilitation of existing and/or development of new plants. The largest natural gas-powered facilities include the Syr Darya and Navoi plants. The coal-powered facilities consist principally of two power plants in the vicinity of the Angren open pit mine near Tashkent.

There are significant opportunities to upgrade Uzbekistan's electrical generation plant through investment in new gas steam turbines, which would greatly improve efficiency. Over the medium term Uzbekistan could increase its export earnings from electricity as its neighbors in the region become increasingly capable of paying for it.

- *Tashkent Thermal Power Plant.* The proposed new power plant would be a gas steam turbine unit with a capacity of 370 MW, at a total cost of \$440 million. (See project profile #UZ1.)
- *Navoi Thermal Power Plant.* The project calls for replacing the existing Navoi Power Plant's first unit with two new gas steam turbines, with a capacity of 120 to 150 MW each for a total capacity of 240 MW to 300 MW at a total cost of \$180 million. (See project profile #UZ2.)
- *Additional Thermal Power Plants.* This project deals with rehabilitation and construction of three additional power plants. The first, in Novo-Angren, will be a gas-fired boiler with a steam turbine generator unit with a capacity of 220-240 MW (total cost: \$288 million). The second calls for the complete removal of the existing Ferghana power station and construction of a new plant on or near the same site with two 60 MW steam turbines with boilers (total cost: \$144 million). The third calls for construction of a new combined cycle steam power plant in Mubarek which will probably a combined-cycle steam turbine power plant (total cost: \$120 million). (See project profile #UZ3.)

No international financing has been established for any of these projects as yet, and vendors are expected to come up with their own financing proposals. Uzbekistan may have to consider opening up its state power monopoly to competition from independent power producers, however, for foreign financing to be realized as hoped.

TRANSPORTATION

Uzbekistan is the center of regional road transport systems in Central Asia, and a number of donor projects focus on upgrading the highway network within Uzbekistan.

- *Bukhara-Turkmenistan Road Rehabilitation.* This \$136 million project will be supported by \$50 million from the Asian Development Bank (ADB). The project will: (1) Rehabilitate the existing road between Bukhara and the Turkmenistan Border to a 4 lane divided highway standard; (2) Support policy reforms and provide institutional strengthening to those Uzbekistan agencies involved with the road sector; and (3) Improve road maintenance and safety systems along the Samarkand - Bukhara - Turkmenistan highway corridor. (See project profile #UZ4.)

- *Bukhara-Tashkent Road Rehabilitation.* Pending final project approval, it is expected that the ADB will provide \$60 million in financing for this project, which will include the following: this project will include the following: (1) Rehabilitation of the existing road along the Bukhara -Tashkent corridor; (2) Support policy reforms and provide institutional strengthening to those Uzbek agencies involved with the road sector; and (3) Improve road maintenance and safety practices. (See project profile #UZ5.)

HEALTH

The World Bank is involved in improvement of the health care delivery service in Uzbekistan.

- *Rural Health Care.* The main project goal is to help improve the quality and the efficiency of health care service delivery in the rural sector. The World Bank has approved a \$30 million loan that will be matched by a \$40 million contribution by the Government of Uzbekistan. (See project profile #UZ8.)

URBAN INFRASTRUCTURE

World Bank economic development projects also focus on improvement of urban infrastructure.

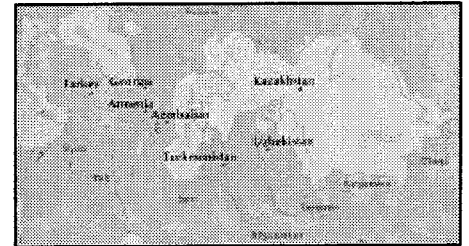
- *Urban Transport Project.* The main objective is to increase the quantity and improve the quality of public transport services in a sustainable manner in five medium-sized Uzbek cities. The \$75 million total cost for the project is to be supported by a \$60 million World Bank loan. Most of the vehicles and equipment procured under the project would come from abroad. (See project profile #UZ6.)



CASPIAN REGION

TRANSCASPIAN PIPELINE (TCP)

| Project Summary | |
|--------------------------|------------------|
| Subsector | Natural Gas |
| Location | |
| Project Cost | US\$ 3.4 Billion |
| Export Potential | US\$ 2.1 Billion |
| Project Type | Gas Pipeline |
| Project Executing Agency | TCP Consortium |



Project Outline

The \$3.4 billion Trans-Caspian Pipeline (TCP) will transport natural gas 1,800 kms from the field fence in Mary, eastern Turkmenistan to Erzurum, Turkey, via Azerbaijan and Georgia. Depending on negotiation of transit rights and financing, construction could start as early as 2001 and be completed in 2004 or 2005.

The exact configuration of the design is still to be determined. Most likely it will evolve in three stages, beginning with Stage I, development of the capacity to export up to 16 bcm to Turkey. Subsequent stages could augment the capacity to 30 bcm, with the residual to go to European markets.

U.S. competitiveness for equipment, machinery and materials exports of up to \$2.1 billion will be high on this project, especially in terms of prototype development of specialized valves and sale of compressors.

Technical Description

Direct project

The Trans-Caspian Pipeline will transport natural gas from Mary, in eastern Turkmenistan, to Erzurum, Turkey, via Azerbaijan and Georgia, once transit rights and fees are negotiated with those countries and a suitable consortium is found to finance and implement the project. Construction could start as early as 2001 and be completed in 2004 or 2005.

The cost of the project will obviously depend on the final configuration of the engineering design agreed in negotiations with the project consortium. Estimates of the technical parameters under several configurations are as follows:

86

| Trans-Caspian Gas Pipeline | | | |
|--|--------------|---------|---------|
| Pipeline Route: Mary, Turkmenistan to Turkish border via Azerbaijan and Georgia | | | |
| Design Operating Pressure: 1,440 PSIG, 100 BARS | | | |
| | BCM per Year | | |
| <u>Design Parameters</u> | 16 | 23 | 30 |
| Onshore Pipe Diameter | 46 | 52 | 56 |
| Offshore Pipe Diameter | 28 | 28 | 28 |
| Offshore Pipe Crossings | 2 | 2 | 2 |
| No. of Compressor Stations | 4 | 4 | 4 |
| Installed Working Horsepower | 485,310 | 579,570 | 785,490 |

This project profile outlines the technical and financial elements of the 16 bcm per year, 46-inch onshore-pipe option, defined as Stage I. The other options may be developed as Stages II or III.

Ancillary projects

A number of ancillary projects not encompassed within the direct project design and cost estimates would complement the TCP pipeline itself. Although feasibility studies would be needed to determine the exact scope and cost of these projects, they are likely to include:

1. Specialized pipelining, trenching and welding/testing equipment. Currently the pipe laying capability of equipment in the Caspian Sea area is limited to 28" concrete-coated pipe. A significant retrofitting of the equipment to handle 30" or 32", with multiple crossings or a new, world-class ship would have to be fabricated in the Caspian Sea to handle 36" to 40" pipe.
2. Upgrade of field-gathering and processing services. Existing gas pipelines and processing facilities would require an upgrade in Turkmenistan.
3. Materials transportation. One of the difficulties facing project planners is that 1.5 – 2 tons of steel pipe would have to be brought into a landlocked region.
 - One option would be to bring the pipe into a Turkish port and then overland. This option would require the purchase of a fleet of trucks to keep the project on schedule.
 - Another option would be to bring the pipe by ship through the Volga-Don, a route limited to 3,000-ton vessels and open only 7 – 8 months of the year. This option would likely require the purchase of locomotives and rolling stock and possibly port upgrades in Poti, Baku and Turkmenbashi.
4. Maintenance control centers. Although the compressor stations would remain unattended there would likely be a need for one maintenance control center in each country, capable of housing a few dozen families, with a small township and hotel or guest house alongside.

5. Telecommunications. A fiber-optic cable would be laid alongside the entire length of the pipeline which could have considerable excess capacity that could be sold or leased to other users.

Project Site

The Trans-Caspian Pipeline (TCP) will transport natural gas 1,800 kms from the field fence in Mary, eastern Turkmenistan, westward under the Caspian Sea to Azerbaijan and Georgia, then south to Ezurum, Turkey, where it will connect with the Turkish pipeline system.

This project profile assumes that one maintenance control center will be needed in each of the three countries, either at the pipeline source, at mid-points or near large cities.

Project Status/Timeline

A feasibility study was completed for TDA by Enron in 1998. The TCP project was announced by the President of Turkmenistan. PSG International, a joint venture including Bechtel and GE Capital, was chosen in February 1999 to develop the project. Project phasing is likely to occur as follows:

- 1999 – 2001: Development and Financing
- 2001 – 2003: Fabrication, Mobilization and Construction
- 2004 – 2005: Commissioning and Commercial Operations

Yearly Expansions: Combination of Compressor Enhancement/Additions and Pipeline Looping

ff

Equipment and Services

| Design Operating Pressure: 1,440 PSIG, 100 BARS | | | |
|---|-----------------|-----------------|-----------------|
| | BCM per Year | | |
| | 16 | 23 | 30 |
| <u>US \$ Millions 1999</u> | | | |
| Development Cost | \$ 100 | \$ 100 | \$ 100 |
| Land & ROW | 174 | 174 | 174 |
| Pipeline, Valves & Materials | 1,301 | 1,618 | 1,776 |
| Field Labor & Installation | 779 | 858 | 911 |
| Compressors/Telecom | 778 | 745 | 993 |
| Eng & Const Mgmt, Financing & Overheads | 303 | 340 | 385 |
| Total Project Cost | \$ 3,435 | \$ 3,836 | \$ 4,339 |

U.S. Competitiveness

U.S. competitiveness in the supply of equipment, machinery and materials worth up to \$2.1 billion will be high on this project, especially in terms of prototype development of specialized valves and sale of compressors. An additional \$300 million in engineering and construction management contracts also are likely to go to U.S. companies. American companies also could be competitive in the sale of pipe to the project consortium, although here they would have to compete with European suppliers, who are closer; there is also discussion of bringing in a Japanese supplier for this in order to encourage Japanese banks to get involved.

American companies could also be competitive in aspects of the ancillary projects involving equipment sales.

Project Financing

Project financing is as yet to be determined. PSG International, which includes Bechtel and GE Capital, has been selected by the Turkmenistan Government to develop the TCP as project sponsor. Ex-Im Bank and OPIC are interested. Japanese banks might participate if the pipe is purchased from a Japanese concern.

Conclusion

This project offers good prospects for U.S. companies. Of the \$2.4 billion in likely foreign (i.e., outside the former Soviet Union) procurement, American companies would hold a competitive advantage in prototype development of specialized valves, sale of compressors, and engineering and construction management. American companies could also be competitive in aspects of the ancillary projects involving equipment sales, and should keep abreast of feasibility studies in these areas as they are developed.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Oil & Gas Industry and Mineral Resources Ministry |
| Contact Person | R. A. Arazov |
| Title | Minister |
| Address | 28, Bitarap Turkmenistan Street, Ashgabat |
| Telephone | (993-12) 35-35-31 |
| Fax | (993-12) 39-28-21 |
| E-mail | |

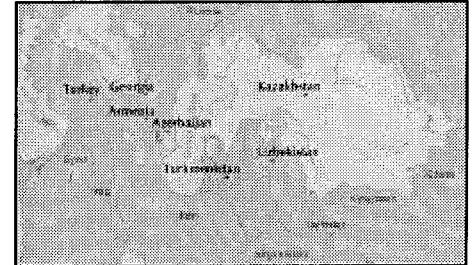
| | |
|------------------------------|---------------------------------|
| Organization or Company Name | PSG International |
| Contact Person | Edward Smith |
| Title | President |
| Address | 49 Park Lane, London, UK W1Y 4E |
| Telephone | 44-171-535-8500 |
| Fax | 44-171-535-8600 |
| E-mail | smithem@psgint.com |

CASPIAN REGION

CPC PIPELINE

Project Summary

| | |
|--------------------------|---------------------------------|
| Subsector | Oil |
| Location | Kazakhstan/Russia |
| Project Cost | US\$ 2.2 Billion |
| Export Potential | US\$ 1.0 Billion |
| Project Type | Procurement & Services |
| Project Executing Agency | The Caspian Pipeline Consortium |



Project Outline

Completion of the crude oil pipeline, including pumping stations, tank farm, marine terminal, shore line facility and single point mooring systems from the Tengiz oil field in Kazakhstan to Novorossiysk, Russia.

Technical Description

The Caspian Pipeline Consortium (CPC) is in the process of constructing a crude oil pipeline to move oil from the Tengiz field to Novorossiysk, a port on the Black Sea. The pipeline has been laid from the Tengiz field to the Komsomolskiy Pumping Station, just past Astrakhan in Russia. Contracts have already been let to secure the remaining pipe required for the project. There remain two pumping stations to be installed in Kazakhstan and eight pumping stations to be installed in Russia. This pipeline is north of the republics of the north Caucasus states that have caused so much turmoil, including Chechnya, North Ossetia, and Dagestan. Oil can be pumped out of the ground at Tengiz for about \$2 a barrel, so low-cost transportation of this oil to international markets is critical. At this time, this is the only crude oil pipeline actually under construction in the Caspian region.

Project Site

The pipeline runs from the Tengiz field in the Republic of Kazakhstan to the port of Novorossiysk in the Russian Federation.

Project Status/Timeline

The project is ongoing, with many procurement contracts already let. CPC has selected a "short list" of contractors to complete the work on the pipeline, but not yet made the final selections as to which contractors will be doing the remaining work. When these contractors are chosen, they will be the companies to contact regarding procurement of equipment related to the construction of the pipeline. These companies should be selected within the next six months.

Equipment and Services

Much of the equipment and services required have already been let to specific contractors. However, significant contracts remain to be tendered. These include: several pumping stations; communications equipment; computer equipment and other specific items required to complete the project.

U.S. Competitiveness

U.S. companies manufacture some of the highest quality equipment for this type of project are very competitive is securing additional procurement contracts.

Project Financing

The project is being commercially financed.

Conclusion

This represents an excellent opportunity for U.S. suppliers of pipeline and pipeline-related equipment. Of all the new pipelines being discussed in the Caspian region, this is the only crude oil pipeline actually being built. Moreover, it is the only one likely to be completed in the next four years.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|--|
| Organization or Company Name | The Caspian Pipeline Consortium |
| Contact Person | Gary Doubel |
| Title | Project Manager |
| Address | Aerostar Hotel, Moscow, Russian Federation |
| Telephone | (7095) 937-6140 |
| Fax | |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | The Caspian Pipeline Consortium |
| Contact Person | Ralph Jones |
| Title | Contracts and Procurement Officer |
| Address | Aerostar Hotel, Moscow, Russian Federation |
| Telephone | (7095) 937-6140 |
| Fax | |
| E-mail | |

| | |
|------------------------------|---------------------------------|
| Organization or Company Name | The Caspian Pipeline Consortium |
| Contact Person | Fred Nelson and Tim Salles |
| Title | |
| Address | |
| Telephone | (7095) 941-8770 |
| Fax | |
| E-mail | |

CASPIAN REGION

MAIN EXPORT PIPELINES (MEP)

| Project Summary | |
|--------------------------|---------------------------|
| Subsector | Crude Oil |
| Location | Caspian Region |
| Project Cost | US\$ 1.0-5.0 Billion |
| Export Potential | US\$ 0.4-2.0 Billion |
| Project Type | Procurement Opportunities |
| Project Executing Agency | AIOC |



Project Outline

A series of oil pipeline options - Main Export Pipelines (MEP) - has been proposed to increase the transport of crude oil from the offshore production facilities in the Caspian Sea to global export points on either the Black or Mediterranean Seas. Western oil exploration and production companies and the region's Governments have formed consortiums to explore, produce and transship the product to global markets. The Azerbaijan International Oil Company (AIOC) is currently the principal operating company with a significant volume of increasing oil production for export over the next several years. During 1997 and 1998, AIOC rehabilitated existing oil pipelines and constructed new segments in Azerbaijan, Georgia and Russia to initiate exports to the Black Sea.

Ongoing explorations by AIOC and other operating companies will lead to further negotiations with local Governments to determine the extent of Caspian oil supplies and the most economic routes for export pipelines. Currently, the Black Sea is the principal export path for the region's oil production, but environmental and strategic concerns by Turkey and other western Governments (including the U.S.) of increased ship traffic via the Bosphorus have prompted studies for competitive alternatives.

U.S. competitiveness for exports of up to \$2.0 billion would be high on these projects, especially in terms of prototype development of specialized pipeline equipment, construction/finance expertise and telecommunication opportunities.

Technical Description

Direct Project

The MEP pipeline systems will transport crude oil from offshore fields in the western Caspian Sea via Azerbaijan, Georgia, Russia and Turkey once export quantities and transit rights/fees are negotiated with those countries. Construction of pipelines would start in 2000 and continue over the next several years as Caspian oil production increases.

The cost of the projects will obviously depend on final determination of the volumes, pipeline routes and negotiations with regional Governments, but the projects' scope are likely to extend over three basic options:

Option 1 - Northern & Western Route (cost: \$1.5 billion): Expansion of existing oil transportation route with new pipeline segments from Baku, Azerbaijan to Novorossiysk, Russia to handle capacities to export additional 5 million metric tons per year.

Option 2 - Baku to Ceyhan Route (cost: \$2.5-\$3.5 billion): A new 1,700-km pipeline from Baku, Azerbaijan to the southeastern port of Ceyhan, Turkey on the Mediterranean Sea. Caspian Sea oil production for export to Turkey and global markets would need to be in excess of 20 million metric tons per year to support the cost and transportation tariffs of the new system vis-à-vis the other options.

Option 3 - Eastern Caspian to Ceyhan Route (cost: \$3.5-\$5.0 billion): Expansion of the Baku to Ceyhan option to access future oil production for the Eastern Shore of the Caspian Sea (Kazakhstan and Turkmenistan). Option 3 would extend over 2,500-km and require throughput of over 50 million metric tons per year.

Ancillary projects

1. The construction of new storage and handling facilities at the ports on the Black and Mediterranean Seas.
2. Transshipment of construction supplies, materials, and pipeline equipment to the Caspian region.
3. Maintenance control centers. Although the compressor stations would remain unattended there would likely be a need for one maintenance control center in each country, capable of housing a few dozen families, with a small township and hotel or guest house alongside.
4. Telecommunications. Fiber-optic cable-systems and switching equipment would be laid alongside the entire length of the pipeline, which could have considerable excess capacity that could be sold or leased to other users.

Project Site

The MEP pipeline systems will transport crude oil production from between 1,000 to 2,500-km from Caspian Sea oil production facilities to new export ports on the Black and Mediterranean Seas.

This project profile assumes that one maintenance control center will be needed in each of the three countries, either at the pipeline source, at mid-points or near large cities.

Project Status/Timeline

The AIOC is currently enhancing and expanding certain existing pipeline routes, and negotiating with regional Governments and other oil producing consortiums to determine the most competitive systems to match anticipated oil reserves and production scenarios.

Equipment and Services

Direct project:

Pipeline

- Construction – \$0.5-1.5 billion
- Materials -- \$0.5-2.0 billion
- Foreign procurement of 28-40 inch oil pipeline stock

Machinery

- Pumping and Maintenance Stations \$0.2-1.5 billion

Ancillary projects:

To be determined depending on project configuration

U.S. Competitiveness

U.S. competitiveness for exports of up to \$2.0 billion will be high on this project, especially in terms of prototype development of specialized valves and equipment, construction management, and construction financing expertise.

96

Project Financing

Project financing is as yet to be determined.

Conclusion

This project offers good prospects for U.S. companies. Of the likely foreign procurement (i.e., outside the former Soviet Union), U.S. and western European companies would hold an advantage for the manufacture and fabrication of pipe and pumping equipment; and highly-skilled construction management expertise. U.S. companies could also be competitive in aspects of the ancillary projects involving telecommunication equipment.

Despite the recent upturn in oil prices, prices remain near historic lows. Given that oil from the Gulf States is the least expensive to get to global markets, higher priced alternatives out of the Caspian region are at a disadvantage. Some oil industry experts are concerned that the price of oil may decline to as little as \$5 a barrel. With such a bearish outlook, and some disappointing drilling results in the south Caspian area, two oil consortia have closed down in recent months. The first, in January, CIPCO, a consortium led by Pennzoil (a U.S. firm) closed and left the region. The second, in March, the North Absheron Operating Company (NAOC), was led by BP Amoco, a UK firm, also closed.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Azerbaijan International Operating Company (AIOC) |
| Contact Person | David Woodward |
| Title | President |
| Address | Villa Petrolea, 2 Neftchilar (Bayil), Baku |
| Telephone | Tel: (994-12) 91-44-70, 91-44-80, 91-46-80 |
| Fax | Fax: 97-96-02, 97-97-37 |
| E-mail | tbayatly@aiocaz.com |

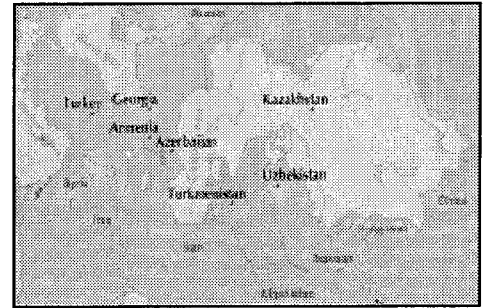
97

CASPIAN REGION

BAKU-BATUMI PIPELINE

Project Summary

| | |
|--------------------------|--------------------------------------|
| Subsector | Crude Oil |
| Location | Transcaucasus |
| Project Cost | US \$500 Million - US \$1 Billion |
| Export Potential | US\$ 50 - \$100 Million |
| Project Type | Procurement Opportunity |
| Project Executing Agency | Chevron |



Project Outline

Chevron is considering building its own pipeline from the Caspian Sea to the Black Sea. Currently, Chevron uses railcars to transit the Caucasus region from Baku to its tank farm in Batumi.

Technical Description

The pipeline would be laid from Baku, Azerbaijan to Batumi, Georgia, nearly parallel to the current rail link. Chevron is considering a pipeline with a capacity of 10 metric tons/per year. The pipeline would have a 20" diameter, and a minimum of 5 pump stations. At this planning stage, pumps could be fueled with either diesel or crude oil. Transshipment facilities in Baku and Batumi are already adequate to move this oil and would require no upgrading. Chevron expressed hope of being able to refurbish an existing pipeline. However, AIOC found that there were so many problems refitting an existing pipeline from Baku, Azerbaijan to Supsa, Georgia that it was more cost effective to simply lay new pipe along the existing route.

Project Site

An 900 kilometer path between Baku, Azerbaijan to Batumi, Georgia.

Project Status/Timeline

Chevron, through Caspian TransCo Inc., is completing a feasibility study at this time. Despite the recent uptick in oil prices, prices remain near historic lows, and the long-term outlook for prices is bearish, according to many experts. This may push construction back at least 3 years from now.

Equipment and Services

Pipeline

- Construction – \$200 million - \$500 million
- Materials -- \$100 million - \$300 million
- Foreign procurement of 20 inch oil pipeline stock

Machinery

- Pumping and Maintenance Stations: \$200 million - \$400 million

U.S. Competitiveness

U.S. competitiveness for exports of up to \$100 million would be high on this project, especially in terms of specialized valves, pumping stations, and other equipment, construction management, and construction financing expertise.

Project Financing

Project financing is to be determined.

Conclusion

This project offers good prospects for U.S. companies. Of the likely foreign procurement (i.e., outside the former Soviet Union), U.S. and western European companies would hold an advantage for the manufacture and fabrication of pipe and pumping equipment; and highly-skilled construction management expertise. U.S. companies could also be competitive in aspects of the ancillary projects involving telecommunication equipment.

99

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|--|
| Organization or Company Name | Chevron |
| Contact Person | David Khurodze |
| Title | Director General |
| Address | Chevron Georgia Inc. 12a, Dzmebi Zubalashvilebi Street 380000 Tbilisi, Georgia |
| Telephone | (995 32) 93-15-36 |
| Fax | (995 32) 92-10-74 |
| E-mail | Khud@chevron.com |

| | |
|------------------------------|--|
| Organization or Company Name | Caspian TransCo Inc. |
| Contact Person | Ted Ferguson |
| Title | Officer |
| Address | Brompton Road, No. 154 (2 nd floor) London SW3 1HX, U.K. |
| Telephone | (44-171) 581-9266 |
| Fax | (44-171) 581-9883 |
| E-mail | |

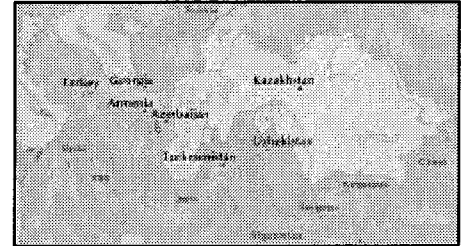
| | |
|------------------------------|--|
| Organization or Company Name | Caspian TransCo Inc. |
| Contact Person | Nezih Elbeyli |
| Title | Country Representative |
| Address | 15 Istiglaliyet Street (Hotel Respublika) Baku 370001, Azerbaijan |
| Telephone | (994-12) 924-924 |
| Fax | (994-12) 925-037 |
| E-mail | |

CASPIAN REGION

BAKU-SUPSA PIPELINE EXPANSION/CHIRAG PLATFORM

Project Summary

| | |
|--------------------------|-----------------------|
| Subsector | Oil |
| Location | Azerbaijan – Georgia |
| Project Cost | US\$ 1.1 Billion |
| Export Potential | US\$ 800 Million |
| Project Type | Oil platform/pipeline |
| Project Executing Agency | |



Project Outline

AIOC's upgraded Chirag platform produces 100,000 barrels per day. An additional platform would bring capacity to between 200,000 and 250,000 barrels per day. An upgrade of AIOC's pipeline to Supsa, Georgia from 150,000 barrels per day to 200,000 to 250,000 barrels per day will be needed.

Technical Description

AIOC currently produces 100,000 barrels of oil per day from an upgraded Soviet platform, and transports the oil to Supsa through the recently completed Baku-Supsa pipeline. A small additional platform could increase AIOC's production capacity to between 200,000 and 250,000 barrels per day. An upgrade of the Supsa Pipeline would be needed to accommodate this increased production capacity. Pipeline capacity would be increased by adding pumping stations, improving pipe alignment and constructing a "shadow pipeline."

Project Site

The Chirag Oil field is part of the Chirag - Azeri Deepwater Guneshli offshore field in the Caspian Sea. Right-of-way through Georgia to Supsa already exists along the current pipeline route.

Project Status/Timeline

The Chirag field began production of "Early Oil" in November of 1997. The Supsa Pipeline was filled in April and the first tanker on the Black Sea has already been filled.

This project is one of several project configurations being considered by teams of AIOC and SOCAR specialists regarding up to three additional offshore platforms. The final decision about which configuration to proceed with is expected by the end of 1999. The decision will depend on a number of factors, including international oil prices. At this time, it appears more likely that the consortium would proceed with one additional platform rather than three.

The project represents the first stage of the development of the Chirag, Azeri and deepwater Guneshli field, which is expected to cost \$10 - \$12 billion and result in the ultimate recovery of more than 4 billion barrels of crude oil.

Equipment and Services

Assuming the decision is made to proceed with one additional platform, equipment and services will be procured by AIOC including a small stationary platform, pumping stations and a new, parallel pipeline. The platform is projected to cost \$800 million, and shadow pipeline and pumping stations \$300 million.

U.S. Competitiveness

U.S. companies supplied all the technology for the Chirag platform upgrade, and American suppliers will be very competitive in respect to the new \$800 million platform and related equipment, as well. The pipeline upgrade would most likely be handled by a local contractor.

Project Financing

The primary source of financing would be the AIOC, which upgraded the Chirag platform and built the original Baku-Supsa pipeline.

In addition, the EBRD and the IFC recently announced that each institution would invest up to \$200 million in development of the Chirag - Azeri Deepwater Guneshli offshore field in the Caspian Sea, including an upgrade of the pipeline to Supsa. Up to \$100 million from each institution will be syndicated. The facility will be provided by way of

five separate loans by each institution to affiliates of BP, AMOCO, PLC, EXXON Corporation, Lukoil Joint Stock Company, Turkiye Petrolleri A.O. and Union Oil Company of California. Citibank, Dresdner Bank and Societe Generale acted as co-arrangers and each contributed \$25 million to the syndicated loans.

Conclusion

Caspian Sea oil production and transport remains expensive relative to other sites, a critical consideration given the current soft price of oil. Nonetheless, the \$400 million in long-term financing on offer from the IFC and the EBRD means that a project will go forward soon to develop the Chirag - Azeri Deepwater Guneshli offshore field. The most likely project configuration at this time appears to be one new platform and a Baku-Supsa pipeline upgrade. American suppliers will be very competitive regarding the offshore platform and related equipment.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | AIOC |
| Contact Person | Peter Adey |
| Title | Manager, Contracts |
| Address | Villa Petrolea, 2 Neftchilar Prospekti, 2 Baku |
| Telephone | 994-12-97-95-03 |
| Fax | 994-12-97-96-53 |
| E-mail | padey@aiocaz.com |

| | |
|------------------------------|--|
| Organization or Company Name | EBRD |
| Contact Person | Veronique Cassegrain |
| Title | Project Officer |
| Address | One Exchange Square London EC2A 2EH United Kingdom |
| Telephone | 44-171-338-7237 |
| Fax | |
| E-mail | |

CASPIAN REGION

MAINTENANCE EQUIPMENT -- GEORGIAN PIPELINE COMPANY

| Project Summary | |
|--------------------------|---------------------------|
| Subsector | Oil pipeline |
| Location | Tbilisi, Trans-Georgia |
| Project Cost | US\$ 1 - 2 Million/year |
| Export Potential | US\$ 1 Million/year |
| Project Type | Procurement |
| Project Executing Agency | Georgian Pipeline Company |



Project Outline

The Georgian Pipeline Company (GPC) has recently completed a crude oil pipeline from Sangachal, Azerbaijan, (near Baku) across Georgia to Supsa on the Black Sea. Some equipment and supplies from the U.S. were used to complete this pipeline. The GPC will need to procure maintenance equipment estimated at \$1 million to \$2 million per year to keep the pipeline operational.

Technical Description

Oil is now being pumped for the first time through this high-pressure pipeline system, and the first offloading at Supsa has already occurred. The pipeline has 9 pumping stations. While GPC originally started by repairing an existing pipeline, after numerous pipeline failures at high pressure, the company decided to simply build a new pipeline parallel to the existing old pipeline for about three-quarters of the existing length. The pipeline has the capacity to move 6 million metric tons annually from the Caspian to the Black Sea. GPC is owned by the 10 companies that also own AIOC. They are: BP/Amoco, Exxon, Unocal, Tpaoc, Statoil, SOCAR, Ramco, Pennzoil, Lukoil, Itochu, and Dhkl. U.S. companies own 22 percent of GPC.

Project Site

From Sangachal, Azerbaijan on the Caspian Sea to Supsa, Georgia on the Black Sea.

Project Status/Timeline

GPC has stockpiled its initial expected maintenance supplies of one year. Additional maintenance equipment will be needed in 2000 and thereafter.

Equipment and Services

Spare parts for the pumping stations, patching equipment, and equipment used ordinarily for the maintenance of a pipeline. If market conditions warrant, GPC officials said that the pipeline's capacity can be tripled with appropriate upgrades. This includes more pumping stations that cost about US \$25 million each.

U.S. Competitiveness

GPC equipment is shipped from the UK to the Caucasus. U.S. companies are at a disadvantage due to the transatlantic shipping costs. Those with European subsidiaries have a better chance of getting this business. GPC uses competitive methods to select its equipment and parts suppliers.

Project Financing

Project is commercially financed.

Conclusion

The prospects for U.S. suppliers will depend on the quality of their equipment and materials outclassing the cost disadvantage of the transatlantic shipment.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|--|
| Organization or Company Name | Georgian Pipeline Company |
| Contact Person | Tim Little |
| Title | Senior Contracts & Procurement Specialist |
| Address | 123 Agmashenebeli Ave., Tbilisi, Georgia |
| Telephone | (995-32) 95-66-10 |
| Fax | (995-32) 94-11-84 |
| E-mail | Tlittle@gpc.aiocaz.com |

| | |
|------------------------------|--|
| Organization or Company Name | Azerbaijan International Operating Company (AIOC) |
| Contact Person | David Woodward |
| Title | President |
| Address | Villa Petrolea, 2 Neftchilar (Bayil), Baku |
| Telephone | Tel: (994-12) 91-44-70, 91-44-80, 91-46-80 |
| Fax | Fax: 97-96-02, 97-97-37 |
| E-mail | tbayatly@aiocaz.com |

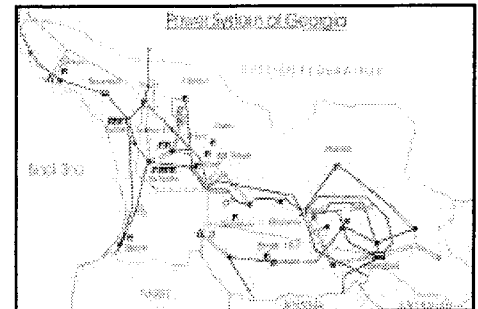
106

CASPIAN REGION

ELECTRICITY GENERATION AND MARKETING

Project Summary

| | |
|--------------------------|----------------------------------|
| Subsector | Energy |
| Location | Transcaucasus |
| Project Cost | To Be Determined by the Market |
| Export Potential | Open |
| Project Type | Investment Opportunity |
| Project Executing Agency | Merrill Lynch, others, see below |



Project Outline

The Government of Georgia will be privatizing its Gardabani thermal power plant through international tender managed by Merrill Lynch. A regional opportunity exists to take advantage of using very low cost gas from Azerbaijan to run the Gardabani plant to generate electricity to sell to Turkey.

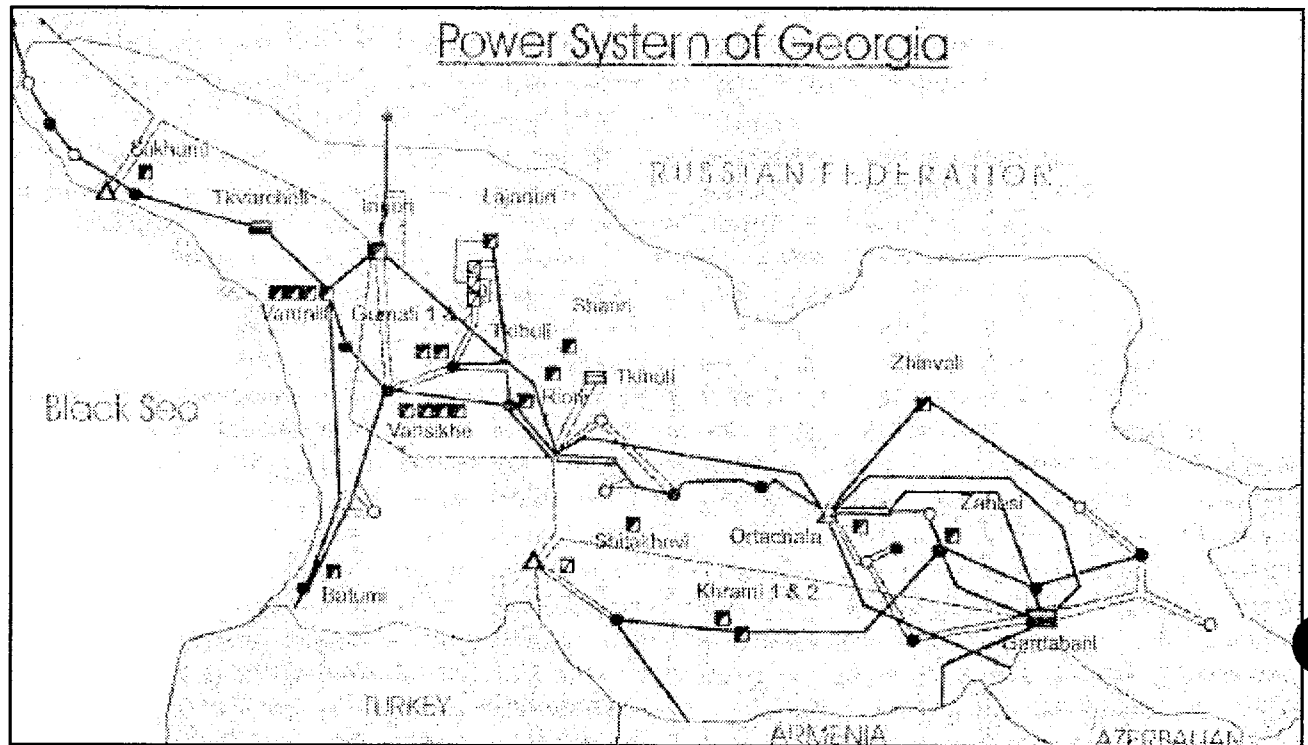
Technical Description

With support of the international donor community, the Government of Georgia is restructuring the nation's power sector. In the electricity subsector, the Government has unbundled transmission, generation and distribution into separate enterprises and organizations. The Government has selected Merrill Lynch to conduct the international tendering for the assets. Merrill Lynch sold a 75 percent interest in Telasi, the Tbilisi Distribution Company, to AES Corporation, a U.S. company. Merrill Lynch will be handling the tender for the Gardabani thermal plant. Bidders will be able to buy up to 75 percent interest from the Government, or bid on 25 – 30 year management contracts.

The problem with developing the Azerbaijan oil reserves is that there is a large amount of natural gas that comes as a coproduct. Currently, the oil companies are simply burning off the natural gas because there is no market for it. Investors who buy the Gardabani plant could purchase natural gas from the companies that have excess supplies of gas in Azerbaijan at a low price, use the gas to generate low-cost electricity, and then sell the electricity to Turkey. The Gardabani plant is rated at 900 MW. The EBRD has made a \$14 million loan to the Government of Georgia to refurbish Unit 1 at the plant.

Project Site

The Gardabani plant is south and east of Tbilisi, near the Georgia-Azerbaijan border.



Project Status/Timeline

Merrill Lynch expects to move ahead with tenders later this year. The privatization process in this subsector likely will take the next 2 – 4 years to be complete. See the project profile on privatizing the electric generation assets in Georgia for more details.

Equipment and Services

Complete descriptions of the assets to be privatized can be obtained from Merrill Lynch upon an expression of interest.

U.S. Competitiveness

AES, a U.S. utility company, purchased the first electric power asset sold via international tender by the Government of Georgia. To qualify to bid, a buyer must have prior experience in operating a hydro or thermal power facility of similar size to the one(s) being bid for. The Government of Georgia strongly encourages the participation of U.S. firms in the bidding process for these projects.

Project Financing

Financing is the responsibility of the bidder. Favorable financing packages can be arranged for U.S. companies through OPIC, the IFC and the EBRD.

Conclusion

This opportunity will assist the oil companies develop the energy resources in the region. BP, a leader in one of the consortia active in Azerbaijan, is especially interested in reducing the amount of natural gas it burns because of the environmental damage done by burning the gas. The Governments of all three countries will support the project.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Merrill Lynch International |
| Contact Person | Luis Vaz Pinto |
| Title | Vice President |
| Address | Ropemaker Place 25 Ropemaker Street London EC2Y 9LY, England |
| Telephone | (44-171) 573-1848 |
| Fax | (44-171) 867-4454 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | Merrill Lynch International |
| Contact Person | Jason M. Schaeffer |
| Title | Analyst |
| Address | Ropemaker Place 25 Ropemaker Street London EC2Y 9LY, England |
| Telephone | (44-171) 867-2320 |
| Fax | (44-171) 892-8622 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of State Property Management |
| Contact Person | Shota Keldishvili |
| Title | Vice-Minister |
| Address | 64 Chavchavadze Ave. Tbilisi 380062, Georgia |
| Telephone | (995-32) 29-30-64 |
| Fax | (995-32) 29-27-90 |
| E-mail | Demir@access.sanet.ge |

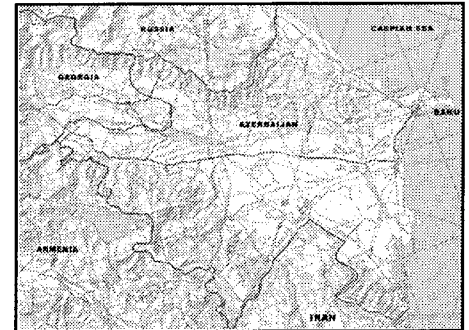
| | |
|------------------------------|---|
| Organization or Company Name | World Bank |
| Contact Person | Jon Walters |
| Title | Senior Task Manager |
| Address | World Bank, Room H 12-125 1818 H Street NW Washington, D.C. 20433 |
| Telephone | (202) 473-2468 |
| Fax | |
| E-mail | jwalters@worldbank.org |

CASPIAN REGION

TRANS-CAUCASUS RAIL LINK PROJECT

Project Summary

| | |
|--------------------------|----------------------------|
| Subsector | Transportation |
| Location | Azerbaijan |
| Project Cost | US\$ 49 Million |
| Export Potential | US\$ 20 Million |
| Project Type | Infrastructure |
| Project Executing Agency | Azerbaijan Railway Company |



Project Outline

The purpose of this project is to rehabilitate sections of the Azerbaijan Trans-Caucasus rail link between Baku Port City and the Border with Georgia.

Technical Description

The Azerbaijan Railways provides a key link of a land-bridge between the Caspian Sea and the Black Sea, connecting Central Asia to Europe. The Trans-Caucasus rail link consists of approximately 924 kilometers of electrified double track originating in Baku to the Georgian Ports of Poti and Batumi. Approximately 529 kilometers of the route are in Azerbaijan.

The objectives of the project are to enhance the physical and economic viability of the Trans-Caucasus railway route as a key international transit freight link for the Caucasus and Central Asia, support the commercialization of the Azerbaijan railway industry, and improve environmental management of the route.

The investment components of the project are:

- Replace the track on sections of the railroad where the track has exceeded its useful life;
- Procure track maintenance equipment to improve maintenance practices and extend the life of the rail tracks;
- Procure and replace sleepers;

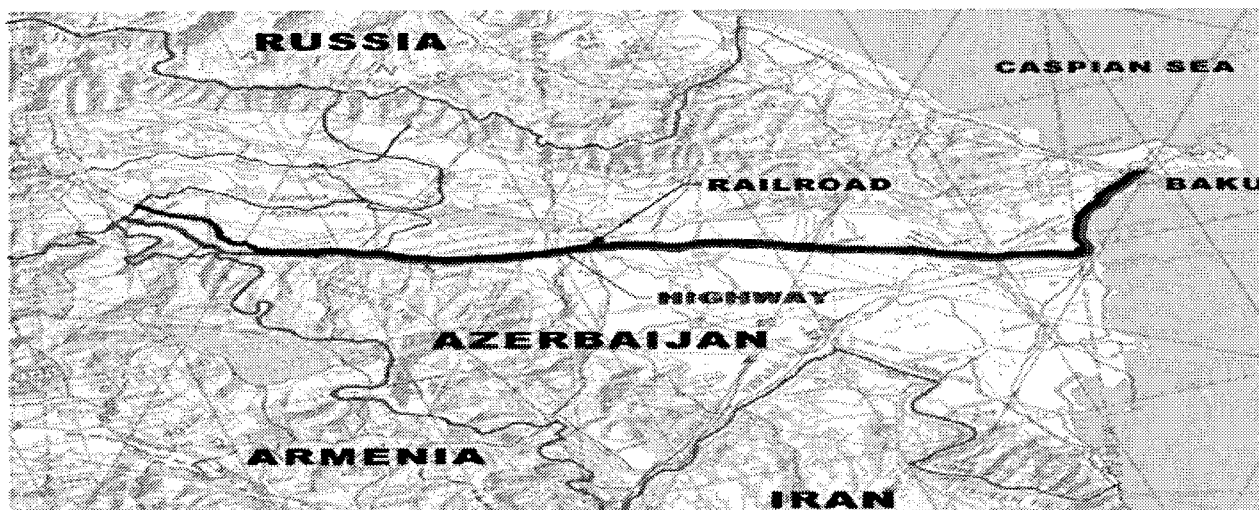
- repair and paint selected bridges which have deteriorated badly;
- upgrade the signaling system so that it can manage the projected traffic level; and
- extend the fiber optic telecommunications line east for its entire length.

Complementing the above investment will be institutional reforms to the Azerbaijan Railways industry to a more market oriented system, including a new Railway Law that reflects the following policies:

- the separation of policy and operating responsibilities in the railway sector, with the Azerbaijan Railway Company being established as a Government owned joint stock company;
- the need for the Azerbaijan Railway Company to be managed according to commercial principles with separate profit centers for freight and passenger transport;
- the introduction of a formal business planning process that will require the company to prepare annual updates of a 5-year business plan and to agree on rolling 5-year operational financial targets;
- phasing out of cross-subsidy of passenger services by freight service, plus a budgetary compensation mechanism for funding loss-making passenger services required by the Government;
- transferring social services to more appropriate Ministries;
- the reorganization of ancillary activities into separate subsidiary entities;
- allowing the company the freedom to set tariffs for freight transport, other than where monopoly powers exist; and to encourage private sector participation and investment in appropriate parts of the railway industry.

Project Site

The Project Site is on the railway line that runs from the Caspian Sea Port of Baku to the Border with Georgia. A map of the proposed section is shown below.



Project Status/Timeline

The feasibility study has been completed, and financing secured. It is expected that the Azerbaijan Railway Company will go out for bid in the second half of 1999 for the required rail repair equipment, procurement of new signaling system, and procurement of the telecommunications equipment and installation.

Equipment and Services

The following track maintenance equipment will be required:

- modern tampers to consolidate the new ballast and align and level the track;
- a rail replacement machine to replace damaged rails;
- light equipment to complement the track renewal program;
- equipment spare parts;
- procurement of rail sleepers;

- procurement and installation of new signaling system; and
- procurement and installation of fiber optic communications line throughout the system.

Project Financing

The total project cost is estimated to be: \$49.0 million.

Infrastructure Cost is estimated to be: \$47.5 million

- Track Renewal \$ 25.4 million
- Track Equipment \$ 3.3 million
- Bridge repair civil and track works \$ 3.3 million
- Signaling Renewal \$ 7.5 million
- Telecommunications Systems \$ 8.0 million

Technical Cooperation costs is estimated to be: \$ 1.5 million

- Project Implementation Assistance \$ 0.9 million
- Restructuring of Support \$ 0.6 million

Funding Agencies:

- EBRD Loan \$ 30.0 million
- EU Grant under TACIS \$ 12.0 million
- Azerbaijan Railway Company \$ 7.0 million

U.S. Competitiveness

The railway system in Azerbaijan is of Russian origin. U.S. companies, however, are highly competitive in producing and selling all this equipment worldwide. U.S. engineering consulting firms are also highly competitive in supplying the technical assistance and training required for this project, however, they may be excluded depending on the scope of TACIS involvement. There is a high probability that U.S. companies could be selected for most the procurements for this project.

Conclusion

The project represents an excellent set of opportunities for U.S. railway maintenance and equipment producers.

Key Decision Makers

| | |
|------------------------------|----------------------------------|
| Organization or Company Name | Azerbaijan State Railways |
| Contact Person | Musa Panahov |
| Title | Deputy Chief of Economy |
| Address | 25a, 28 May Street, Baku, 370010 |
| Telephone | 994-12-98-61-27 |
| Fax | 994-12-98-61-27 |
| E-mail | NA |

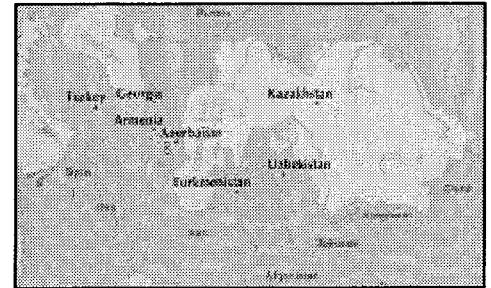
| | |
|------------------------------|--|
| Organization or Company Name | EBRD |
| Contact Person | Lala Goulieva |
| Title | Project Banker |
| Address | 5 Sabir Street, Baku 370004 |
| Telephone | 994-12-97-10-14 |
| Fax | 994-12-97-10-19 |
| E-mail | goulievl@bku.ebrd.com |

CASPIAN REGION

GEORGIA TRANS-CAUCASUS RAIL LINK PROJECT

Project Summary

| | |
|--------------------------|-------------------------|
| Subsector | Transportation |
| Location | Georgia |
| Project Cost | US\$ 33 Million |
| Export Potential | US\$ 15 Million |
| Project Type | Infrastructure |
| Project Executing Agency | Georgia Railway Company |



Project Outline

The purpose of the Georgia Trans-Caucasus Rail Link Project is to rehabilitate worn or obsolete equipment between Sestafoni and Senaki.

Technical Description

The Georgian Railways, along with the Azeri railroad, provide the key rail link between the Black Sea and the Caspian Sea, connecting the landlocked countries of Armenia and Central Asia to Europe. The Trans-Caucasus rail link consists of approximately 924 kilometers of electrified double track, connecting Baku in Azerbaijan to the Georgian Ports of Poti and Batumi. Approximately 425 kilometers of the route are in Georgia.

The objectives of the project are to: enhance the physical and economic viability of the Trans-Caucasus railway route as a key international transit freight link for the Caucasus and Central Asia; support the commercialization of the Georgian railway industry; and improve environmental management of the route.

The investment components of the project are:

- replacing the track on sections of the railway between Sestafoni and Senaki where the useful life of the track has been reached;
- procuring modern track maintenance equipment to improve maintenance practices and extend rail life;
- procuring and replacing bridge sleepers, and repainting of selected bridges;
- replacing the signaling system so that it is consistent with the projected traffic level; and
- extending the fiber-optic communications line east from Samtredia.

Complementing the above investment will be measures to implement the transition of the Georgian Railways industry to market conditions, including a new Railway Law that reflects the following policies:

- separating policy and operating responsibilities in the railway sector, by establishing the Georgian Railway Company as a Government owned joint stock company responsible for operations;
- the need for the Georgian Railway Company to be managed according to commercial principles with separate profit centers for freight and passenger transport;
- introducing a formal business planning process that will require the company to prepare annual updates to a 5-year business plan and to agree on rolling 5-year operational financial targets;
- phasing out the cross-subsidy of passenger services by freight, coupled with establishing a budgetary compensation mechanism for funding loss-making passenger services required by the Government;
- transferring social services to more appropriate Ministries or the private sector;
- reorganizing ancillary activities into separate subsidiary entities;
- allowing the company the freedom to set freight rates, other than where monopoly powers exist; and encouraging private sector participation and investment in appropriate parts of the railway industry.

Project Site

The Project Site is on the railway line that runs from the Black Sea Port of Poti to the Azerbaijan Border. A map of the proposed section is shown below.

Project Status/Timeline

The feasibility study has been completed and the financing has been obtained. It is expected that the Georgian Railway Company will go out for bid in mid-1999 for the required rail repair equipment, procurement of new signaling system, and procurement of the telecommunications equipment and installation.

Equipment and Services

The following track maintenance equipment will consist of the following items:

- modern tampers to consolidate the new ballast and align and level the track;
- a rail replacement machine to replace damaged rails;

- light equipment to complement the track renewal program;
- equipment spare parts;
- procurement of bridge sleepers;
- procurement and installation of a new signaling system; and
- procurement and installation of fiber-optic communications line east from Samtredin.

U.S. Competitiveness

The railway system in Georgia is of Russian origin equipment and rails. However, since most of the funds will be provided by the EBRD, it is very possible that the U.S. suppliers may be competitive on the signaling equipment and the telecommunication system. As in Kazakhstan, U.S. firms likely will be competitive for the track equipment. U.S. firms may also be interested in the project implementation assistance and support for restructuring.

Project Financing

The total project cost is estimated to be approximately \$33.2 million.

Infrastructure cost is estimated to be approximately \$32.0 million

- | | |
|---|----------------|
| • Track Replacement | \$12.9 million |
| • Track Equipment | \$ 3.3 million |
| • Bridge repair civil and track works | \$ 2.3 million |
| • Signaling equipment | \$ 6.5 million |
| • Telecommunications Systems | \$ 7.0 million |
| • Technical Cooperation costs (estimated) | \$ 1.2 million |
| • Project Implementation Assistance | \$ 0.6 million |
| • Restructuring of Support | \$ 0.6 million |

Funding Agencies:

- | | |
|----------------------------|-----------------|
| • EBRD | \$ 20.0 million |
| • EU-Tacis | \$ 7.2 million |
| • Georgian Railway Company | \$ 6.0 million |

Conclusion

The project represents an excellent set of opportunities for U.S. railway maintenance equipment producers, and U.S. firms supplying the relevant consulting services.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Ministry of Transport |
| Contact Person | Zviad Kvatchantiradze |
| Title | Director, European Integration & Intl' Relations |
| Address | 12, A. Kazbegi Avenue, 380060 Tbilisi |
| Telephone | 995 32 939 145 |
| Fax | 995 99 500 860 |
| E-mail | |

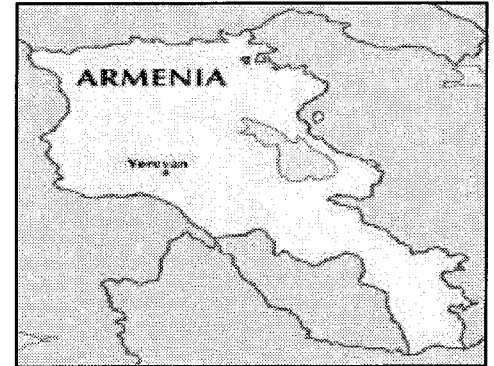
| | |
|------------------------------|--|
| Organization or Company Name | EBRD |
| Contact Person | Mariam Megvinetuhutsesi |
| Title | Resident Representative |
| Address | 7 Niko Nikoladze Street, 380008, Tbilisi |
| Telephone | 995 32 920 512/513 |
| Fax | 995 32 931 135 |
| E-mail | Mmegvine@access.sanet.ge |

CASPIAN REGION

ARMENIA SECTION OF EAST-WEST SILK ROAD

Project Summary

| | |
|--------------------------|-----------------------|
| Subsector | Transportation |
| Location | Ayrum to Gyumri |
| Project Cost | US\$ 92 Million |
| Export Potential | US\$ 13 Million |
| Project Type | Design & Construction |
| Project Executing Agency | Department of Roads |



Project Outline

This project presents the design and construction necessary to upgrade to current international standards the Armenia Section of the Tbilisi, Georgia to Horasan, Turkey East - West Highway from the border of Georgia to the border of Turkey. This is a distance of approximately 164 kilometers.

Technical Description

This project covers a section of road across Armenia which would become part of the Transcaucasus highway route to expedite east-west movements by road of freight and passengers between Europe through Turkey, Armenia, Georgia, and Azerbaijan to Central Asia. Much of the information in this document comes from the Caucasus Transportation Strategy Interim Report prepared under the USAID/IRIS Program. The technical and cost information are based on the Armenia Highway Survey, Preliminary Report of September 1994 financed by the European Commission as part of the TACIS Program.

The road alignment of the proposed east - west highway project would start at Horasan, Turkey pass through the town of Kars and cross into the Republic of Armenia near the town of Gyumri. The highway would then cross Armenia by way of the towns of Spitak, Vanadzor, Aliverdi, and Ayrum, and enter Georgia near the town of Sadaklho. The highway would then pass through Marneuli to Tbilisi, the capital of the Republic of Georgia. The total length of the road alignment from Turkey to Georgia is approximately 446 kilometers. About 216 kilometers will be in the Republic of Turkey, 164 kilometers in the Republic of Armenia, and 66 kilometers in the Republic of Georgia. This alignment was chosen because it was the shortest of the routes surveyed under the numerous studies by the various nations' Department of Highways.

120

This east - west road should be upgraded to international motorway standards and will connect to Highway E80 in Turkey at Horasan. The section of roadway in Turkey should be upgraded to E80 standards to the border with Armenia.

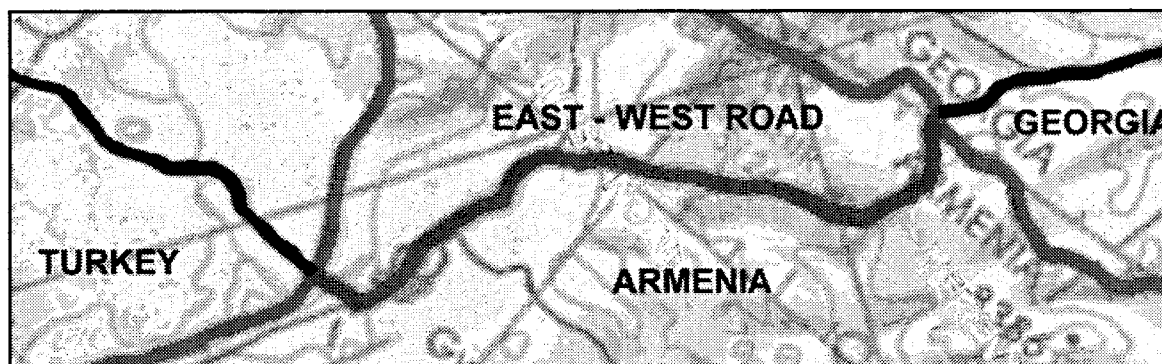
The same international motorway standards should be used for upgrading the proposed highway across Armenia and Georgia. It is anticipated that the new highway will consist of 2-lane asphalt pavement, designed and rebuilt to international highway standards.

The following is an estimate of the cost to build a new international standard east - west highway across Armenia as stated above.

| | |
|---|--------------------------|
| 35.53 km of new construction @ \$1,000,000 per km | = \$29.58 Million |
| 79.97 km of reconstruction @ \$610,000 per km | = \$44.38 Million |
| 48.50 km of rehabilitation @ \$370,000 per km | = \$17.95 Million |
| <u>Total cost of 166 km of upgraded road</u> | <u>= \$91.91 Million</u> |

Project Site

The new east - west highway across Armenia would begin at the Turkish border just west of the town of Gyumri. It would end at the Georgian border north of the town of Bagratashen. It would pass through or around the towns of Jajoor, Loussaghbyoor, Shirakamoot, Spitak, Vanadzor, and Alaverdi. The total length would be approximately 166 kilometers. The roadway would pass through terrain ranging from flat to rolling to mountainous.



Project Status/Timeline

The detailed feasibility study should be completed in 1999, and a loan could be signed in early 2000. The design could be completed in 2000, construction could begin in 2001 and be completed in 2004.

Equipment and Services

The following Services would be required:

- a) Engineering Design and Supervision Services = \$ 8.35 Million
- b) Construction Services = \$83.55 Million

Equipment = \$12.53 Million (50% New)
Earthwork Excavation Equipment (cost of equipment included
in construction cost above)

Equipment needed would include: Aggregate Crushing Equipment; Asphalt Concrete Pavement Plant; Concrete Plant Compaction Equipment; Tamping Rollers; Steel Wheel Rollers; Pneumatic Tire Rollers; Dump Trucks; and Lowboy Trailer Trucks.

U.S. Competitiveness

U.S. engineering firms would be highly competitive for the feasibility study, design services and engineering supervision services. U.S. construction engineering firms would be less competitive, and may not have great interest in the part of the world at this time. U.S. equipment suppliers would be very interested and in the competitive range for all the required construction equipment for the project.

Project Financing

World Bank (underway) = \$60.50 Million
Government of Armenia = \$31.41 Million

The TDA may be interested in funding the detailed feasibility study that must be done before any international donor will fund the remainder of this project. The World Bank is already funding highway projects in Armenia and has funded some rehabilitation work on this alignment. It is anticipated that this road section would become an integral part of the World Bank Program in the Caspian region.

Conclusion

This project will be a critical section of the Transcaucasus transportation east - west corridor connecting Europe to Central Asia. Political realities, however must be considered when anticipating traffic flows on this corridor. The blockade by Turkey and Azerbaijan of Armenia has been in place since 1994 and is unlikely to be lifted in the foreseeable future.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Transport |
| Contact Person | Arthur S. Avanyan |
| Title | Deputy Minister |
| Address | 10 Zakian Street, Yerevan, Republic of Armenia |
| Telephone | (374-2) 58-66-01 |
| Fax | |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | The World Bank-Armenia Resident Mission |
| Contact Person | Owaise Saadat |
| Title | Resident Representative |
| Address | Republic Square Khorhertarani Street #2 Yerevan, Armenia |
| Telephone | (374-2) 50-50-60 |
| Fax | (374-2) 151-787 |
| E-mail | Osaadat@worldbank.org |

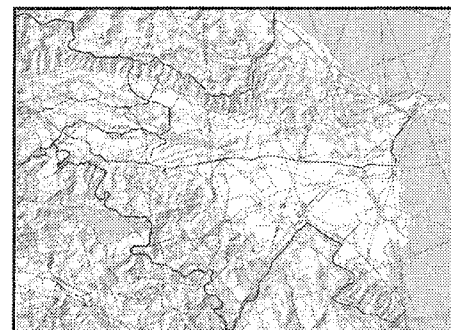
| | |
|------------------------------|--|
| Organization or Company Name | The World Bank-Armenia Resident Mission |
| Contact Person | Gohar Abajian |
| Title | Energy and Infrastructure Consultant |
| Address | Republic Square Khorhertarani Street #2 Yerevan, Armenia |
| Telephone | (374-2) 52-39-92 |
| Fax | (374-2) 151-787 |
| E-mail | Gabajian@worldbank.org |

CASPIAN REGION

AZERBAIJAN SECTION OF EAST-WEST SILK ROAD

Project Summary

| | |
|--------------------------|---------------------|
| Subsector | Transportation |
| Location | Azerbaijan |
| Project Cost | US\$ 383 million |
| Export Potential | US\$ 35 million |
| Project Type | Infrastructure |
| Project Executing Agency | Department of Roads |



Project Outline

The purpose of this project is to rehabilitate and upgrade the Baku Port to Georgia Border Road. The total length of the road is approximately 535 kilometers.

Technical Description

The length of the route is 535 kilometers connecting Baku Port located on the Caspian Sea with the transcaucasus road in Georgia at the border with Azerbaijan. The project will be implemented in two stages. Stage I will consist of rehabilitating the existing road. This stage will repair the subgrade and base course, patch the pot-holes in the pavement, and overlay with a leveling course and final wearing course of asphalt or concrete pavement. Stage I will be divided into the following sections for rehabilitation:

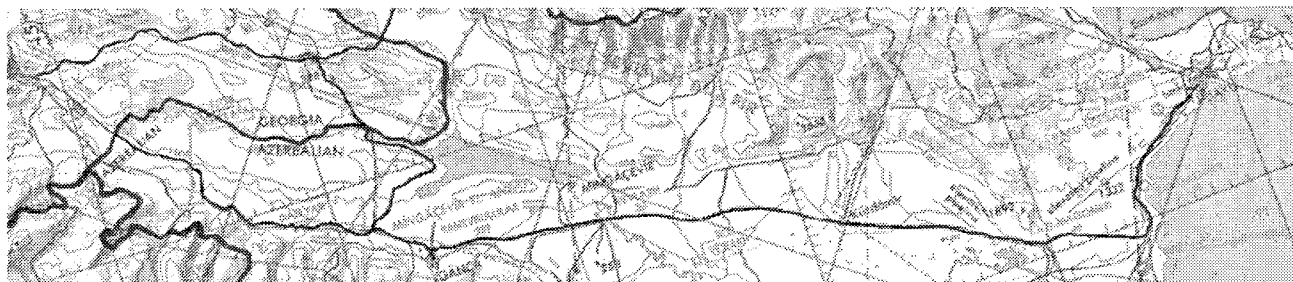
| Priority No. | Project Description | Length Km | Project Cost US\$ (Millions) |
|--------------|--|-----------|------------------------------|
| 1 | Baku Port to Sangachaly Road Section | 58 | 9.28 |
| 2 | Sangachaly to Kazimagomed Road Section | 80 | 12.80 |
| 3 | Kazimagomed to Kurdamir Road Section | 112 | 17.92 |
| 4 | Kurdamir to Yevlakh Road Section | 70 | 11.20 |
| 5 | Yevlakh to Ganca Road Section | 70 | 11.20 |
| 6 | Ganca to Georgia Border Road Section | 145 | 23.20 |
| | Total Rehabilitation | 535 | 85.60 |

Stage II, will consist of designing and building 535 kms. of 2-lane international standard roadway along side the existing rehabilitated roadway. It also includes bypasses around the major towns. Grade separations and interchanges will be built at all major road intersections. Lighting will be installed in towns as necessary. Road markings and signs will be upgraded to international standards. Old bridges and drainage structures will be rehabilitated as required to bring them up to international standards. This road system is a good candidate for a toll road system and can be implemented by the private sector. Stage II will be divided into the following sections for design and construction:

| Priority No. | Project Description | Length Km | Project Cost US\$ (Millions) |
|--------------|---|-----------|------------------------------|
| 1 | Baku Port to Sangachaly Road Section | 58 | 29.0 |
| 2 | Sangachaly to Kazimagomed Road Section | 80 | 40.0 |
| 3 | Kazimagomed to Kurdamir Road Section | 112 | 56.0 |
| 4 | Kurdamir to Yevlakh Road Section | 70 | 35.0 |
| 5 | Yevlakh to Ganca Road Section | 70 | 35.0 |
| 6 | Ganca to Georgia Border Road Section | 145 | 72.5 |
| 7 | Toll Collection System Installed | 535 | 20.0 |
| | Total New Construction & Modernization Projects | 535 | 287.5 |

Project Site

The Project begins on the Caspian Sea Coast at Baku Port. The alignment basically followed the existing national highway from the city of Bali to the Border of Georgia. The terrain is flat to rolling and presents no major construction difficulties. A map of the project is presented below.



Project Status/Timeline

The present status of the project is that the Government of Azerbaijan is looking for assistance from aid donors for part of the cost of the rehabilitation works.

125

The Government of Azerbaijan hopes to receive loans from the World Bank and the European Union for part of the design and construction for the rehabilitation works.

The design work and bid documents should be completed in mid-1999 and bids for construction solicited in early 2000 for the rehabilitation work.

The Government of Azerbaijan hopes to get assistance for the private sector to implement the reconstruction and modernization works for implementing an international Motorway standard and may be a tollway.

Equipment and Services

Design and supervision of construction services cost is estimated to be \$7.8 Million for the rehabilitation services (50% foreign currency).

The design and supervision of construction cost is estimated to be \$26.2 Million for the reconstruction and modernization program for the tollway (50% foreign currency).

The construction services cost is estimated to be \$ 77.8 Million for the rehabilitation of the existing road works (5% procurement of new equipment).

The construction services cost is estimated to be \$261.3 Million for the construction of the new 2-lane roadway plus upgrading the rehabilitated section to motorway and tollway standards (5% procurement of new equipment).

Procurement of new equipment will be required and is estimated to be \$17.46 Million. The Azeris seem to be very interested in obtaining U.S. or European construction equipment. The following is the types of equipment and material that will be required:

- a) Asphalt Concrete Plants;
- b) Concrete Plants;
- c) Earthwork Excavation Machines;
- d) Compacting Equipment - tamping rollers, steel wheel rollers & pneumatic rollers;
- e) Asphalt Laydown Machine;
- f) Dump Trucks;
- g) Backhoes;
- h) Traffic Signs;
- i) Lighting Systems;
- j) Traffic Marking Paint; and
- k) Toll System Equipment.

U.S. Competitiveness

Many U.S. Consulting Engineering firms have expressed interest in the design and construction supervision works if the project is funded by the World Bank.

It is anticipated that some U.S. firms may be interested in bidding on the construction works if funded by the World Bank or EBRD.

U.S. firms are very competitive for all types of construction equipment and would be interested in any new equipment, and especially if the construction firm is a European or American firm. The toll systems would have to come from the U.S., Europe or Japan. Moreover, the U.S. is very competitive in the modern equipment to best operate a toll road.

Project Financing

| | |
|--|------------------------|
| Design & Supervision of Construction Services for Rehabilitation | \$ 7.8 Million |
| Design & Supervision of Construction Services for Modernization | <u>\$ 26.2 Million</u> |
| Total Design & Supervision of Construction | \$ 34.0 Million |
| Construction Services for Civil Works for Rehabilitation | \$ 77.8 Million |
| Construction Services for Civil Works for Modernization | <u>\$261.4 Million</u> |
| Total Construction Services | \$349.2 Million |

It is anticipated that the Stage I work for this project will be partially financed by the World Bank or European Union under the TRACECA Program.

| | |
|-----------------------------|-----------------|
| Total Cost of Project | \$ 85.6 Million |
| World Bank Funding | \$ 40.0 Million |
| EBRD, Islamic Bank, TACIS : | \$ 33.0 Million |
| Government of Azerbaijan | \$ 12.0 Million |

It is anticipated that the Stage II funding would be mostly from the private sector to implement a toll road.

Conclusion

The Project has top priority on the list of highway improvement projects of the Government of Azerbaijan. The project will proceed with or without donor participation, but will take a long time to complete without donor participation. Funding by the World Bank or European Union or both for approximately 65 percent of the cost is necessary to get the rehabilitation project started and completed quickly.

127

The Government of Azerbaijan has planned a budget for rehabilitation in their 1999 National budget.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Roads Agency (Azeravtoyol) |
| Contact Person | Yusif Novruzov |
| Title | President |
| Address | 72/4 Uzeyir Hajybeyov St., Baku 370010 |
| Telephone | (994 12) 98-55-86 |
| Fax | (994 12) 94-31-48 |
| E-mail | NA |

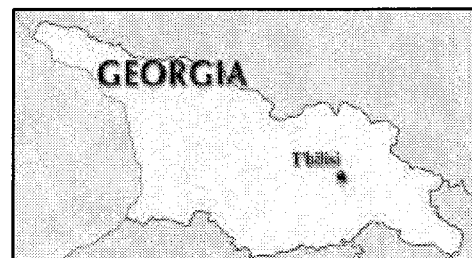
| | |
|------------------------------|---|
| Organization or Company Name | The World Bank |
| Contact Person | Luis Revuelta |
| Title | Project Officer |
| Address | 1818 "H" Street, NW, Washington DC, USA |
| Telephone | (202) 473 2440 |
| Fax | (202) 477 3378 |
| E-mail | lrevuelta@worldbank.org |

CASPIAN REGION

GEORGIA SECTION OF EAST-WEST SILK ROAD

Project Summary

| | |
|--------------------------|-----------------------|
| Subsector | Transportation |
| Location | Tbilisi - Sadaklho |
| Project Cost | US\$ 37 Million |
| Export Potential | US\$ 5 Million |
| Project Type | Design & Construction |
| Project Executing Agency | Department of Roads |



Project Outline

This project presents the design and construction required to upgrade to current international standards the Georgia section of the Tbilisi, Georgia to Horasan, Turkey East-West Highway from the Border of Armenia to the Capital City of Georgia, Tbilisi. This upgrade is for a distance of about 66 kilometers.

Technical Description

This project covers a section of road across Georgia which would become part of the Transcaucasus Highway route to expedite east-west movements by road of freight and passengers between Europe through Turkey, Armenia, Georgia, and Azerbaijan to Central Asia. Much of the information in this document comes from the Caucasus Transportation Strategy Interim Report prepared under the USAID/IRIS Program. The technical and cost information are based on the Georgia Highway Survey, Preliminary Report of September 1994, financed by the European Commission as part of the TACIS Program.

The road alignment of the proposed East-West Highway project would start at Horasan, Turkey pass through the town of Kars and cross into the Republic of Armenia near the town of Gyumri. It would then cross Armenia by way of the towns of Spitak, Vanadzor, Aliverdi, and Ayrum, entering Georgia near the town of Sadaklho through Marneuli to Tbilisi, the capital of the Republic of Georgia. The total length of the road alignment from Turkey to Georgia will be approximately 446 kilometers. Approximately 216 kilometers will be in the Republic of Turkey, 164 kilometers in the Republic of Armenia and 66 kilometers in the Republic of Georgia. This alignment was chosen because it was the shortest of the routes surveyed under the numerous studies by the various nations' Department of Highways.

This East-West Road should be upgraded to international motorway standards and will connect to Highway E80 in Turkey at Horasan. The section of roadway in Turkey should be upgraded to E80 standards to the border with Armenia.

The same international Motorway standards should be used for upgrading the proposed highway across Armenia and Georgia. It is anticipated that the new highway will consist of 2-lane asphalt pavement design and built to international highway standards.

The following is an estimate of the cost for construction an new international standard east-west highway across Georgia as stated above.

| | |
|---|--------------------------|
| 14.13 km of new construction @ \$832,500 per km | = \$11.76 Million |
| 31.80 km of reconstruction @ \$555,000 per km | = \$17.65 Million |
| <u>20.08 km of rehabilitation @ \$ 370,000 per km</u> | <u>= \$ 7.43 Million</u> |
| Total cost of 66 km of road upgrade | = \$36.84 Million |

Project Site

The new east - west highway across Georgia would begin at the Armenia Border just south of the town Sadaklho. It would end at the west end of the Tbilisi Bypass Road. It would bypass the town of Marneuli. The total length would be approximately 66 kilometers. The roadway would pass through terrain ranging from flat, to rolling to mountainous.

Project Status/Timeline

A detailed feasibility study should be completed in 1999, then a loan could be signed in early 2000. The design could be completed in 2000, while the construction could then begin in 2001 and be complete in 2004.

Equipment and Services

The following Services would be required:

| | | |
|----|---|---|
| a) | Engineering Design and Supervision Services | = \$ 3.35 Million |
| b) | Construction Services | = \$33.49 Million |
| | Equipment | = \$ 3.35 Million (50% New) (cost of equipment included in construction cost above) |

Equipment needed would include: Earthwork Excavation Equipment, Asphalt Concrete Pavement Plant, Concrete Plant, Compaction Equipment, Tamping Rollers, Steel Wheel Rollers, Pneumatic Tire Rollers, Dump Trucks, and Lowboy Trailer Trucks.

U.S. Competitiveness

U.S. engineering firms would be highly competitive for feasibility study, design services and engineering supervision services. U.S. construction engineering firms would be less competitive, and may not have great interest in the part of the world at this time. U.S. equipment suppliers would be very interested and be in the competitive range for all the required construction equipment for the project.

Project Financing

World Bank (underway) = \$24.00 Million
Government of Georgia = \$12.84 Million

The TDA may be interested in funding the detailed feasibility which needs to be done before remainder of this project could be funded by international donor. The World Bank is already funding highway projects in Armenia and has funded some rehabilitation work on this alignment. It is anticipated that this road section would become an integral part of the World Bank Program in the Caspian region.

Conclusion

This Project is a very important section of the Trans-Caucasus transportation east - west corridor connecting Europe to Central Asia. Political realities must be considered, however, and given the problems between Turkey, Armenia and Azerbaijan, this highway is unlikely to be open to traffic until the blockades against Armenia are lifted.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Transport |
| Contact Person | Merab Adeishvili |
| Title | Minister of Transport |
| Address | 12 Kazbegi Ave, 380060 Tbilisi, Republic of Georgia |
| Telephone | (995 32) 932-846 |
| Fax | (995 32) 770-017 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | The World Bank Resident Mission Georgia |
| Contact Person | Joseph Owen |
| Title | Resident Representative |
| Address | 18A Chonkadze Street Tbilisi, Georgia |
| Telephone | (995 32) 94-22-13 |
| Fax | (995 32) 99-52-88 |
| E-mail | Jowen@worldbank.org |

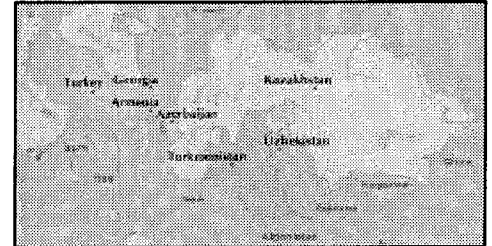
| | |
|------------------------------|--|
| Organization or Company Name | The World Bank Resident Mission Georgia |
| Contact Person | Zurab Javakhivili |
| Title | Project Officer |
| Address | 18A Chonkadze Street Tbilisi, Georgia |
| Telephone | (995 32) 99-04-48 |
| Fax | (995 32) 99-52-88 |
| E-mail | Nmikeladze@worldbank.org |

CASPIAN REGION

TURKISH SECTION OF EAST-WEST SILK ROAD

Project Summary

| | |
|--------------------------|------------------------|
| Subsector | Transportation |
| Location | Armenia to Horasan |
| Project Cost | US\$ 118 Million |
| Export Potential | US\$ 16 Million |
| Project Type | Design & Construction |
| Project Executing Agency | Department of Highways |



Project Outline

This project presents the design and construction work required to upgrade to current international standards the Turkish section of the Tbilisi, Georgia to Horasan, Turkey east - west highway from the border of Armenia to the town of Horasan, Turkey. This is a distance of approximately 216 kilometers.

Technical Description

This project covers a section of road across Turkey which would become part of the Transcaucasus highway route to expedite east-west movements by road of freight and passengers between Europe through Turkey, Armenia, Georgia, and Azerbaijan to Central Asia. Much of the information in this document comes from the Caucasus Transportation Strategy Interim Report prepared under the USAID/IRIS Program. The technical and cost information are based on the Highway Survey, Preliminary Report of September 1994 financed by the European Commission as part of the TACIS Program.

The road alignment of the proposed East-West Highway project would start at Horasan, Turkey, pass through the town of Kars and cross into the Republic of Armenia near the town of Gyumri. The highway would then cross Armenia by way of the towns of Spitak, Vanadzor, Aliverdi, and Ayrum, entering Georgia near the town of Sadaklho. It would then pass through Marneuli to Tbilisi, the capital of the Republic of Georgia. The total length of the road alignment from Turkey to Tbilisi is approximately 446 kilometers. About 216 kilometers will be in the Republic of Turkey, 164 kilometers in the Republic of Armenia and 66 kilometers in the Republic of Georgia. This alignment was chosen because it was the shortest of the routes surveyed under the numerous studies by the various nations' Department of Highways.

This east-west road should be upgraded to international motorway standards and will connect to Highway E80 in Turkey at Horasan. The section of roadway in Turkey should be upgraded to E80 standards to the border with Armenia.

The following is an estimate of the cost for construction a new east - west highway across Turkey as stated above. Existing road and improvements would be used to the extent possible.

| | |
|---|---------------------------|
| 45.38 km of new construction @ \$832,500 per km | = \$ 37.78 Million |
| 102.13 km of reconstruction @ \$555,000 per km | = \$ 56.68 Million |
| 64.49 km of rehabilitation @ \$370,000 per km | = \$ 23.86 Million |
| <u>Total cost of 212 km of new road</u> | <u>= \$118.32 Million</u> |

Project Site

The new east - west highway across Turkey would begin at the Armenian border just west of the town of Gyumri. It would end at the town of Horasan in Eastern Turkey where it would connect to Highway E80. It would bypass the town of Kars and other small villages along the way. The total length would be approximately 216 kilometers. The roadway would pass through terrain ranging from flat to rolling to mountainous.

Project Status/Timeline

A detailed feasibility study should be initiated and completed in 1999; a loan signed in early 2000; the design completed in 2000; and construction may begin in 2001. If all goes smoothly, the highway would be completed in 2004.

Equipment and Services

The following Services would be required:

- a) Engineering Design and Supervision Services = \$ 10.76 Million
- b) Construction Services = \$107.56 Million

Equipment = \$ 10.76 Million (50% new)
(cost of equipment included in construction cost above).

Equipment needed would include: Aggregate Crushing Equipment; Asphalt Concrete Pavement Plant; Earthwork Excavation Equipment; Concrete Plant Compaction Equipment; Tamping Rollers; Steel Wheel (vibratory) Rollers; Pneumatic Tire Rollers; and Trucks, including Dump & Lowboy Trailer Trucks.

U.S. Competitiveness

U.S. engineering firms would be highly competitive for the feasibility study, design services and engineering supervision services. U.S. construction engineering firms would not be very competitive, and may not have great interest in the part of the world at this time. U.S. equipment suppliers, however, would be very interested and in the competitive range for all the required construction equipment for the project.

Project Financing

World Bank (underway) = \$77.00 Million
 Republic of Turkey = \$41.32 Million

The TDA may be interested in funding the detailed feasibility which will be required before this project will be funded by international donors. The World Bank is already funding highway projects in Turkey and has funded some rehabilitation work on this alignment. It is anticipated that this road section would become an important part of the World Bank Program in the Caspian region.

Conclusion

This project is a critical section of the Transcaucasus transportation east-west corridor connecting Europe to Central Asia. Political realities, however must be considered when anticipating traffic flows on this corridor. The blockade by Turkey and Azerbaijan of Armenia has been in place since 1994 and is unlikely to be lifted in the foreseeable future.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Transport and Communications |
| Contact Person | Yaman Kok |
| Title | Director General, Department of Highway Construction |
| Address | Baheelievler Son Durak Emek, Ankara, Turkey |
| Telephone | (90 312) 425-2343 |
| Fax | (90 312) 425-4738 |
| E-mail | |

135

| | |
|------------------------------|--|
| Organization or Company Name | The World Bank Resident Mission to Turkey |
| Contact Person | Ajay Chhibber |
| Title | Resident Representative |
| Address | Ataturk Bulvari, No. 211 Gama-Guris Building Kat 6 06683 Kavaklidere, Ankara |
| Telephone | (90 312) 468-4527/30 |
| Fax | (90 312) 468-4526 |
| E-mail | Achhibber@worldbank.org |



ARMENIA PROJECTS

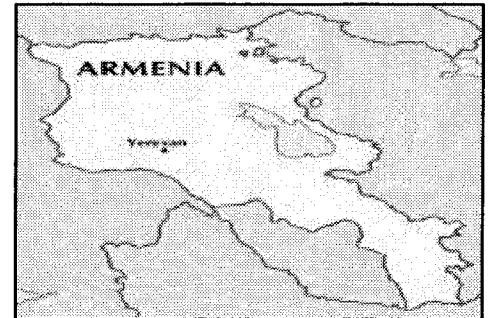
| MAP NO. | PROFILE NO. | PROJECT NAME | LOCATION |
|---------|-------------|---|------------|
| 1. | AR1 | Electricity Transmission & Distribution Project | Yerevan |
| 2. | AR2 | Construction Of Unit 5 At Hrazdan TPP | Hrazdan |
| 3. | AR3 | Municipal Development Project | Yerevan |
| 4. | AR4 | Marriott Hotel Armenia Renovation | Yerevan |
| 5. | AR5 | Hotel/Tourism Opportunities | Nationwide |
| 6. | AR6 | Agribusiness Development | Nationwide |



REPUBLIC OF ARMENIA

ELECTRICITY TRANSMISSION & DISTRIBUTION PROJECT

| Project Summary | |
|--------------------------|-----------------------------|
| Subsector | Transmission & Distribution |
| Location | Yerevan |
| Project Cost | US\$ 33 Million |
| Export Potential | US\$ 26 Million |
| Project Type | Procurement & Services |
| Project Executing Agency | PIU, Ministry of Energy |



Project Outline

The purpose of the Power Sector Restructuring & Development Program is: (a) to place the power sector on an efficient, commercial footing; (b) to help meet the country's electricity requirements in a reliable and cost-effective manner; (c) to attract private capital to meet the bulk of the capital requirements in the sector; and (d) to eliminate quasi-fiscal subsidies provided in the form of non-payments and other non-technical losses of electricity, and below cost recovery tariffs.

Technical Description

World Bank Project Appraisal Document completed on January 14, 1999.

The development objectives of the proposed Electricity Transmission and Distribution Project are: (a) to improve measurement and accountability of electricity and revenue flows between generation, transmission and distribution companies, and within the Yerevan Distribution Company (YDC); (b) to reduce technical losses in the electricity transmission and YDC, and improve system availability; and (c) to improve the commercial performance and financial condition of Armenergo (transmission and dispatch) and YDC.

The Program is to be implemented in two phases. In addition to improving supply reliability and reducing technical losses, the primary purpose of each phase will be to: (a) Phase I - reduce the amount of unmetered electricity, improve the commercial performance of the transmission company, the central dispatch company, and the Yerevan Distribution Company which is responsible for about 50 percent of electricity sales in the country, strengthen the regulatory framework, and sell the majority shares of YDC to a strategic private investor; and (b) Phase II - to facilitate the privatization of

remaining state-owned power distribution and thermal generation companies while ensuring reliable electricity supply, and addressing social (worker retrenchment) and environmental (site cleanup) obstacles (if any) to successful commercialization and privatization of the sector.

Key Performance Indicators for Project:

- a) By December 1999: Majority shares in Yerevan Distribution Company offered for privatization to strategic investors.
- b) By March 31, 2000: Reconciliation of electricity flows between generation, transmission, and distribution companies, and consumers connected directly to the transmission grid and verification of technical losses in transmission presently estimated at 6%.
- c) By June 30, 2000: Issuance of an unqualified audit report of Armenergo (transmission and dispatch and YDC in accordance with International Standards of Audits).
- d) By June 30, 2000: Issuance of an unqualified audit report of Armenergo (transmission and dispatch and YDC in accordance with International Standards of Audits).
- e) By June 30, 2000: Inclusion of load-flow characteristics in tariff design (time-of-day pricing) and inclusion of reasonable technical losses in tariffs.
- f) By December 31, 2000: Electricity billing by Armenergo and YDC increased from 82% to 92% and collections increased from 85% to 90% of billings.
- g) By December 31, 2000: Reduction in technical losses in transmission from 6% to 5.5% to be confirmed by metering, and YDC distribution from 13.5% to 12.5%.

Project Site

System Metering - The main features of this component are the installation of energy, current, load and volt meters at the busbars between the generation companies and the High Voltage Electric Network Company (HVENC), at key transmission sub-stations within the HVENC, between HVENC and the distribution companies (to support new commercial arrangements), and at key sub-stations within the distribution companies (to permit internal control). Meters will be specified to be able to store data and to be compatible for connection to the System Control and Data Acquisition (SCADA) system to be installed under the OECF financed portion of the project. It is envisaged that 144 transfer points between generation and transmission, 192 sub-stations within Armenergo, and key locations within Yerevan Distribution Company will be metered under this component.

Transmission System Rehabilitation - This component will primarily focus on the rehabilitation of the following transmission sub-stations: Ekhegnadzor (220/110/35 kV, Zovuni (220/110/10 kV), Marash (220/110/10 kV), and Shaumian-2 (220/110/10 kV). This component will include the procurement of tools and testing equipment. The rehabilitation will involve: (a) replacement of existing 220kV air circuit breakers (Cbs) by SF6 circuit breakers at the substations at Ekhegnadzor, Zovuni and Marash; (b) replacement of existing 220kV current transformers at the sub-stations at Zovuni and

Marash; (c) replacing existing 110kV big volume oil Cbs by SF6 Cds at Zovuni and Marash; (d) Replacement of existing 110kV current transformers at Zovuni and Marash; (e) reconstruction and modernization of low voltage switchgear on Shaumian-2 22-/110/10kV sub-station with installation of cells with SF6 or vacuum circuit breakers; (f) improvement of civil and steel works at sub-stations in which new equipment is to be installed.

Rehabilitation of the Yerevan Distribution System - This component will rehabilitate low-voltage (35 KV) sub-stations and underground and overhead cables in Yerevan. The remaining three (3) distribution companies, and parts of Yerevan not covered by the IDA credit, are to be rehabilitated under the OECF financed project and under Phase II of the program (APL) if necessary. Equipment and training to improve end-user metering, billing and collections is being funded under an on-going USAID program. The IDA credit would primarily finance circuit breakers, transformers, and medium and low voltage overhead cables.

Upgrade of Armenergo, the National Dispatch Company - This component will provide computers and software for power system planning, load management, and strengthening of the management capacity to manage financial flows in the system. Additional strengthening of Armenergo is to be covered by the OECF-financed project.

Consultant Services and PIU Costs - This component will provide for: (a) procurement and implementation supervision; (b) establishment and operation of PIU, including operating costs; (c) external audit of Armenergo and YDC (FY 1998 and 1999 financial statements) by an internationally reputed accounting firm; and (d) strengthening of Armenergo's management capacity, particularly its financial and technical management capacity, ability to dispatch generation plants based on economic criteria, and to establish and operate a financial settlements unit.

Project Status/Timeline

The World Bank Project Appraisal Document was submitted on January 14, 1999. The World Bank Commitment Date is expected to be May 31, 1999. The World Bank closing date is expected to be June 30, 2002.

The USAID funding is already in place. USAID is presently providing technical assistance, supply of working capital (commodities, including natural gas and spare parts) to cover critical shortages during the transition to full commercialization, and metering and billing equipment. \$15 million of gas was supplied in 1996 and \$30 million in 1997. An additional \$15 million was committed in 1998.

The Project has parallel financing of approximately \$42 million from OECF, which will be managed by the same PIU of the Ministry of Energy.

If the Phase I Project is proceeding satisfactorily, a Phase II Project will be considered.

141

Equipment and Services

Estimated Equipment & Spares

| | | |
|----|--|-------------------|
| a) | System Metering | = \$ 6.30 million |
| b) | Circuit Breakers, Fuses & Transformers | = \$12.54 million |
| c) | Overhead MV & LV Cable | = \$ 2.65 million |
| c) | Maintenance Tools & Test Equipment | = \$ 0.28 million |

Consultancy Services

| | | |
|----|---|--------------------------|
| a) | Procurement Assist & Implementation Supervision | = \$ 1.00 million |
| b) | Establishment and Support of PIU | = \$ 0.20 million |
| c) | Financial Audit | = \$ 0.20 million |
| d) | Management Strengthening of Companies | = \$ 2.10 million |
| | <u>Civil Works & Steel Works</u> | <u>= \$ 0.25 million</u> |
| | Total | = \$25.52 Million |

U.S. Competitiveness

Goods and services to be procured under this Project will be purchased through international competitive tender announced in Development Business. U.S. firms selling such equipment will be treated on an equal footing with companies from other countries selling the equipment.

Project Financing

The Project is financed in five separate components with a total cost of \$32.97 million.

| | | |
|----|--|-------------------|
| 1. | System Metering | = \$ 7.25 million |
| | a) Transmission System Metering | = \$ 5.53 million |
| | b) Distribution System Metering | = \$ 1.72 million |
| 2. | Transmission System Rehab & Spares | = \$ 9.11 million |
| 3. | Distribution System Rehabilitation | = \$13.44 million |
| | a) Yerevan System Rehabilitation | = \$11.54 million |
| | b) Yerevan Accounting/Billing Equip. | = \$ 1.90 million |
| 4. | Dispatch Strengthening | = \$ 1.01 million |
| 5. | Procurement & Implementing Supervision | = \$ 1.60 million |
| 6. | Operating Cost of PIU | = \$ 0.40 million |
| 7. | Other Costs (Commitment Fee & Interest Cost) | = \$ 0.17 million |

145

| | |
|--|--------------------|
| World Bank IDA Funding, Washington, DC | = \$ 21.00 million |
| USAID Funding, Washington, DC | = \$ 8.20 million |
| Government of Armenia Funding | = \$ 3.77 million |

Phase II funding is to be \$32 million from EBRD, and \$42 million from OECF.

Conclusion

This is a solid opportunity for U.S. companies with experience buying electricity distribution/generation companies in the NIS. Companies new to the NIS should partner with a US company that has such experience. The Project requires the following expertise from U.S. firms:

- a) Consulting services for privatizing the companies.
- b) Investors interested in buying shares in electricity distribution companies, and
- c) Electric transmission and distribution equipment suppliers.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Energy PIU, (Energy Invest SCJSC.) |
| Contact Person | Armen Yeghiazarian |
| Title | Project Manager |
| Address | Ministry of Energy, Yerevan, Armenia |
| Telephone | (374-2) 15-18-09 |
| Fax | (374-2) 15-18-09 |
| E-mail | envest@sci.am |

| | |
|------------------------------|--|
| Organization or Company Name | World Bank Armenia Resident Mission |
| Contact Person | Gohar Abajian |
| Title | Energy & Infrastructure Consultant |
| Address | Khorrertarani St. #2, Yerevan |
| Telephone | (374-2) 52-39-92 |
| Fax | (374-2) 151-787 |
| E-mail | Gabajian@worldbank.org |

| | |
|------------------------------|---|
| Organization or Company Name | U.S. Agency for Int. Development |
| Contact Person | Mike Green |
| Title | Program Manager- Economic Restructuring |
| Address | USAID/Yerevan, Dept. of State, Washington, D.C.20521-7020, USA |
| Telephone | (374-2) 151-551 |
| Fax | (374-2) 151.550 |
| E-mail | Mgreen@usaid.gov |

REPUBLIC OF ARMENIA

CONSTRUCTION OF UNIT 5 AT HRAZDAN TPP

Project Summary

| | |
|--------------------------|---|
| Subsector | Power |
| Location | Hrazdan |
| Project Cost | US\$ 200+ Million |
| Export Potential | Open-Up to project cost |
| Project Type | Procurement, Services, Possible Investment |
| Project Executing Agency | Ministry of Energy |



Project Outline

To complete the construction of a thermal power plant at the Hrazdan Power Complex, using imported natural gas to generate about 300 MW of electric power.

Technical Description

The construction of this power unit has a long and somewhat complex history. The bottom line is that substantially more money than was originally envisioned will be needed to complete the unit. How much more money is in dispute. The EBRD, after disbursing \$43 million for the Unit, has suspended their loan. Japan's and China's Ex-Im banks have expressed their interest in additional financing of the project. The Government's top priority now is to find a strategic investor to operate the plant.

In April 1993, the EBRD approved a \$57.4 million sovereign loan to complete construction of a new 300 MW gas-fired power station. The loan, in support of the Armenian Government's strategy in the energy sector, was aimed at helping to increase the country's power generating capacity, improve the efficiency of the electricity supply, and reduce the environmental impact of the power sector. The loan was supported by technical assistance for energy sector regulatory reform, electricity tariff reform, installation of modern accounting systems in the Armenian electric utility, preparation of a medium-term plan for the power sector, and development of modern oil and gas contracting practices.

The loan was suspended in 1996 because of disagreements between the Government of Armenia and EBRD. In 1997, EBRD proposed a second financing plan and sovereign guarantee to complete the work already begun under the first loan. EBRD was willing to provide a \$29.8 million (ECU 21.5 million) loan to the Republic of Armenia to complete the Unit's construction, provided the unit was privatized. However, several independent

consultants and the Government of Armenia estimate the cost of completing the Unit to be \$110 million - \$150 million. The Government of Armenia, EBRD, and other possible funders are still negotiating how to complete the Unit. The Ministry of Energy is hoping to find a private strategic investor willing to buy into the project.

Project Site

Hrazdan is about 50 Kms. North of Yerevan.

Project Status/Timeline

The project began in 1993, but the current status of the negotiations suggest the project is on hold until a strategic investor steps forward.

Equipment and Services

The Unit has been designed with equipment manufactured in Russia in mind. For example, the gas boiler is to have 1000 t/h, steam pressure of 240 Kg./square meter, and steam temperature of 545 degrees C. The turbine is to generate 300 MW, with cooling equipment integrated into the system. A large generator and air-condensation system is also required.

U.S. Competitiveness

This may represent an investment opportunity for an investor with experience in the NIS and knowledge of how to do business in Armenia. Any investor interested in this project must visit the site, meet with the EBRD and the key official in the Ministry of Energy. Given that the Unit has been partially built with equipment from Russia and Hungary, opportunities for U.S. exporters and procurement of U.S. equipment is rated low.

Project Financing

The EBRD has already invested \$43 million as of 1996. Japan's and China's Ex-Im banks appear interested in further financing. Since the ultimate cost of the project is still subject to debate, and that the principals are still in negotiation, financing is uncertain at this time.

Conclusion

The construction of this power unit has been underway since 1993. Given the history of the project, any potential investor is urged to take special precautions prior to committing funds to completing the unit.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Energy, Republic of Armenia |
| Contact Person | S. Eristan |
| Title | Director, PIU Hrazdan #5 |
| Address | 375001, Government Building #2, Republic Square, Yerevan, Armenia |
| Telephone | (3742) 52-98-71 |
| Fax | (3742) 15-13-94 |
| E-mail | |

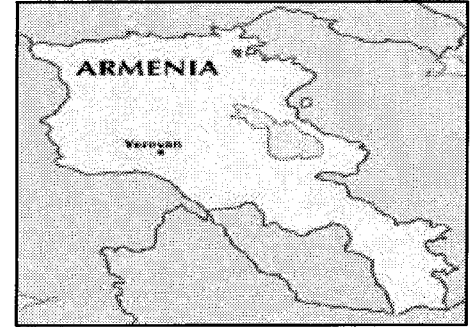
| | |
|------------------------------|--|
| Organization or Company Name | European Bank for Reconstruction & Development |
| Contact Person | Alkis Drakinis |
| Title | Principal Banker, Power/Energy Utilities |
| Address | 20, Baghramian Avenue, Yerevan 375019 |
| Telephone | (3742) 15-13-72 |
| Fax | (3742) 15-13-73 |
| E-mail | |

REPUBLIC OF ARMENIA

MUNICIPAL DEVELOPMENT PROJECT

Project Summary

| | |
|--------------------------|----------------------|
| Subsector | Infrastructure/Water |
| Location | Yerevan |
| Project Cost | US\$ 30 Million |
| Export Potential | US\$ 15 Million |
| Project Type | IDA |
| Project Executing Agency | The World Bank |



Project Outline

The project's main objectives are:

- 1) to make emergency short-term improvements in water supply system.
- 2) to improve the efficiency, management, operation and delivery of water in Yerevan.
- 3) to recruit a private operator through a management contract.
- 4) to lay the groundwork to increase the role of the private sector.
- 5) to serve as a pilot program to refurbish/update the drinking water system throughout Armenia.

Technical Description

Immediate Investment Program - \$4.91 million (IDA-financed)
 Management Contract - \$5 million (IDA)
 Operating Investment Fund - \$5.69 million (IDA)
 Capital Investments - \$9.40 million (IDA)
 Housing - \$1.51 million (IDA)
 Technical Assistance - \$3.49 million (IDA)

Project Site

Yerevan Drinking Water Company, Yerevan, Armenia. Yerevan has a parallel water piping system to provide water for street cleaning and to water the city's numerous parks. This parallel system is also in need of serious repair and upgrading to prevent substantial loss of fresh water. As the current project evolves, this parallel system may also be modernized.

148

Project Status/Timeline

This five-year Project began on September 30, 1998. The Management Contract will be awarded this June, and \$1 million of the Immediate Investment Program for the procurement of water pipe has already been awarded. Procurements from the \$15 million in the Operating Investment Fund and Capital Investments may be advertised as early as this June or July in Development Business. However, since this is a pilot program for the whole of Armenia's drinking water infrastructure, business opportunities are likely to stretch into the foreseeable future.

Equipment and Services

Yerevan has suffered from water shortages since the mid-1970s, partly due to concerns about the drawdown of Lake Sevan, and increasingly from a deteriorating municipal water supply infrastructure. Pumping stations need to be rebuilt and pumps replaced, pipes at all stages of the distribution system need to be replaced, and valves and storage facilities all need to be replaced. The last water infrastructure investment was probably made in the 1970s by the Soviet Union. So, equipment needs are those of an urban water supply system serving a population of about 1.3 million that has been neglected for over 20 years. Moreover, Yerevan's climate is extreme—below freezing and icy in the winter and very hot and dry (often over 100°f) in the summer, adding stress to the water supply system.

U.S. Competitiveness

IDA uses international competitive tenders. U.S. firms are on equal footing with firms from other countries. Contact and developing a relationship with the winner of the Management Contract will be major factors in determining who will get the business. U.S. firms are highly recommended to carefully evaluate local partners; those companies with good local partners are more likely to win business and be more profitable.

Project Financing

IDA will provide \$30 million. Invitations to bid on parts of this Project will be listed in United Nations Development Business. Given the scope of the problem facing the country, this is likely to be a first stage for ongoing activities upgrading Armenia's water supply systems.

Conclusion

This project is now under way. Urban water projects in Armenia represent good business opportunities for U.S. firms that are willing to invest in the region, learn the local politics, and take a long-term perspective. Even a World Bank-financed project such as this can be difficult to implement given the evolving nature of the legal and regulatory framework.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Economy (PIU) |
| Contact Person | Michael Melkumian |
| Title | Director |
| Address | Government House - Republic Square Yerevan 375010 |
| Telephone | (78852) 151-142 |
| Fax | (78852) 151-142 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | The World Bank |
| Contact Person | Jan Drozd |
| Title | Environmental Engineer |
| Address | 1818 H Street, NW |
| Telephone | (202) 47 32 348 |
| Fax | (202) 47 73 378 |
| E-mail | JDROZDZ@worldbank.org |

| | |
|------------------------------|--|
| Organization or Company Name | The World Bank Armenia Resident Mission |
| Contact Person | Gohar Abajian |
| Title | Infrastructure Consultant |
| Address | Khorhertarani St. #2, Yerevan |
| Telephone | (374-2) 50-50-60; 52-39-92; 15-16-86 |
| Fax | (374-2) 15-17-87 |
| E-mail | Gabajian@worldbank.org |

REPUBLIC OF ARMENIA

MARRIOTT HOTEL ARMENIA RENOVATION

| Project Summary | |
|--------------------------|------------------------|
| Subsector | Hotels |
| Location | Yerevan |
| Project Cost | US\$ 22 Million |
| Export Potential | US\$ 15 Million |
| Project Type | Procurement & Services |
| Project Executing Agency | AK Development, LLC |



Project Outline

In late 1998, the Government of Armenia sold 80 percent of the Hotel Armenia. AK Development LLC purchased the 80 percent share in the city's flagship hotel for \$8 million. The purchasers promised to invest \$22 million for the hotel's reconstruction and rehabilitation by 2001.

Technical Description

Marriott International Inc. has been retained to manage the hotel and control the massive rehabilitation job. The acquiring company, registered in Delaware, has a two-year exclusive option to purchase the remaining 20 percent ownership from Hayarttour, the relevant State enterprise, for \$2 million. The Hotel Armenia was the flagship Intourist hotel during Soviet times. It is located on Yerevan's Republic Square, opposite the Prime Minister's office complex, near the Ministry of Finance, Central Bank, and other key government office complexes. The hotel has over 200 rooms, a business center, several restaurants, and a main restaurant with chandeliers that are at least 20 feet tall. This stately property, however, needs a total makeover, from new plumbing, room fixtures, carpet, paint, to the installation of a modern air conditioning system. The hotel has never had air conditioning, and had no central heat from 1991 - 1994.

Project Site

The hotel is located in Republic Square, Yerevan, Armenia.

Project Status/Timeline

By contract with the government, the new private owners are obligated to invest \$22 million by 2001 to rehabilitate and renovate the hotel. Additional renovations, over the \$22 million figure and beyond 2001, are likely to be needed to make this hotel into a four or five star property.

Equipment and Services

Equipment and engineering services are large relative to the scale of the building. The hotel was built by the Soviets in the 1930's, and has lacked adequate maintenance since prior to Armenia's independence in 1991. This includes: plumbing; wiring; backup generator; elevators; institutional kitchen facilities; lighting fixtures; room furniture and fixtures; central heating/air conditioning equipment; windows with energy-efficient frames; bathroom fixtures; and carpeting.

U.S. Competitiveness

Because the new owners are from the U.S., and the Marriott will strive to make this property into one of its top-of-the line facilities, U.S. suppliers of the above equipment and U.S. construction-supervision firms should be well placed to win the procurement contracts.

Project Financing

The IFC is negotiating with Marriott to help finance this job. However, IFC financing is not a prerequisite for the project to be realized. With \$8 million at risk, the new owners have a strong incentive to move ahead with this project in a timely manner.

Conclusion

This is a good opportunity for U.S. suppliers of hotel equipment and construction materials, and U.S. suppliers of engineering and construction supervision services. Because the Hotel Armenia is a very high visibility project in Armenia, U.S. businesses new to the region may find this to be a good introduction. The Government of Armenia is likely to give special attention to make the hotel's rehabilitation and success go as smoothly as possible.

152

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|---|
| Organization or Company Name | Marriott International Inc. |
| Contact Person | James Fisher |
| Title | Senior Vice President & Managing Director for International Hotel Development |
| Address | Lodging Development—Marriott International Inc. Marriott Drive Washington, D.C. 20058 |
| Telephone | (301) 380-2600 |
| Fax | (301) 380-6699 |
| E-mail | |

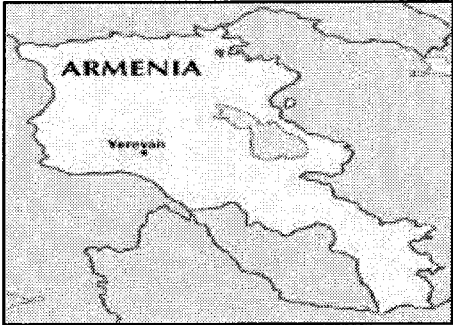
| | |
|------------------------------|---|
| Organization or Company Name | Marriott International Inc. |
| Contact Person | Anil Sampat |
| Title | Manager |
| Address | Republic Square, Khorhertananit Street, Yerevan, Armenia |
| Telephone | (374-2) 59-91-90 |
| Fax | (374-2) 52-53-93 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | International Finance Corp. |
| Contact Person | Thomas Radez |
| Title | Resident Representative |
| Address | Republic Square #2, Khorhertananit Street, Yerevan, Armenia |
| Telephone | (374-2) 52-48-84 |
| Fax | (374-2) 52-09-92 |
| E-mail | |

REPUBLIC OF ARMENIA

HOTEL/TOURISM OPPORTUNITIES

| Project Summary | |
|--------------------------|------------------------|
| Subsector | Hotel/Tourism |
| Location | Nationwide |
| Project Cost | US\$ 5 – 20 Million |
| Export Potential | Open |
| Project Type | Investment Opportunity |
| Project Executing Agency | Not Applicable |



Project Outline

The Republic of Armenia offers some very good opportunities in several different niches of the hospitality industry. Armenia is the source of several unique cultivars and species of birds and butterflies. Ecotourism tours, organized around Armenia's unique wildlife, will have an increasing appeal as undisturbed habitats become more rare. In addition, throughout the country, there are over 30 ancient churches and shrines that would make an excellent tour stop for religious tourists heading for Middle East. So, there exist good opportunities nationwide to open small hotels and guesthouses at the two to three star level (U.S. standards) to help develop these two lines of tourism.

Technical Description

While the business tourist industry is well served in Yerevan, especially with the recent entry of Marriott International into the market, there are no two – three star hotels or bed and breakfast enterprises to serve the middle or lower end of the hospitality industry. The lack of adequate lodging is most acute outside of Yerevan.

The tourist industry apart from business travelers is in its infancy. There are good air connections with Europe and Yerevan via British Airlines, Swissair, Aeroflot, and the local carrier, Armenian Airlines. Armenia has several beautiful national parks, a major freshwater lake, forests, and the potential for winter sports at several locations in the mountains.

Armenia also has a large Diaspora that represents a potential market for tourism in the countryside. Many people of Armenian heritage would welcome the availability of reasonably priced accommodations across the country.

Project Site

Alaverdi, Tsakhkadzor, Echmiadzin (where the Armenian Church's equivalent of the Vatican is located), and Jermuk (source of mineral springs) could all support small two to three star hotels or bed and breakfasts that are up to U.S. standards.

Project Status/Timeline

Interested investors are urged to contact the Ministry of Trade and Tourism to secure government support. Tourism opportunities will best be developed in concert with established international tourist agencies. The field is open for development now.

Equipment and Services

The Republic of Armenia has been advised on the need to develop a Tourism Master Plan. It is a member of the World Tourism Organization. There is a need for tourism consultants to help the Government shape the policy environment to encourage the development of the tourist industry. To serve the immediate needs of tourists in the mid to lower sections of the international market, investors could establish a Greenfield operation, or retrofit existing properties in a number of locations to serve as guest houses. Specific equipment needs will depend on the market niche to be served by the proposed facility.

U.S. Competitiveness

U.S. firms are competitive in this industry worldwide, and have good opportunities in Armenia. All investors in Armenia should be prepared for an evolving legal and regulatory structure and a tax system that is not sufficiently transparent.

Project Financing

Project financing is available from commercial sources and from the EBRD. The EBRD's mission is to promote private-sector development in the New Independent States, and will respond to a well-developed business plan with a projected rate of return. The EBRD encourages applications for financing from U.S. firms.

Conclusion

For investors who are willing to operate in an economy that is still in the transition to a market system, the tourism sector in Armenia offers some good opportunities. Investors should be prepared for problems common in transition economies and be willing to take a long-term perspective.

Key Contacts

| | |
|------------------------------|---------------------------------------|
| Organization or Company Name | Ministry of Trade and Tourism |
| Contact Person | Hayk Gevrokyan |
| Title | Minister |
| Address | 5, Khorretarani St., Yerevan, Armenia |
| Telephone | (3742) 56 1609; 58 29 36 |
| Fax | (3742) 5059 01 |
| E-mail | |

| | |
|------------------------------|-------------------------|
| Organization or Company Name | Smithsonian Institution |
| Contact Person | Leonard Hirsch |
| Title | |
| Address | |
| Telephone | (202) 357-4788 |
| Fax | |
| E-mail | |

REPUBLIC OF ARMENIA

AGRIBUSINESS DEVELOPMENT

Project Summary

| | |
|--------------------------|-----------------------------|
| Subsector | Agriculture |
| Location | Nationwide |
| Project Cost | US \$ 5 - 20 Million |
| Export Potential | Open |
| Project Type | Investment & Procurement |
| Project Executing Agency | Several, see below |



Project Outline

There are more than 10 concrete opportunities for investment and procurement related to growing, processing, and marketing Armenia's high-quality, low-input fruits and vegetables. On a smaller scale, there are also opportunities in Armenia's animal feed mixing and distribution, and fertilizer markets.

Technical Description

Some experts believe that Armenia is the origin of many key cultivars used today. Armenia produces some of the most flavorful fruits and vegetables in the world. However, the processing industry has virtually disappeared due to the breakdown of historical marketing channels with the breakup of the Soviet Union. Armenia was the first of the former Soviet Union republics to privatize farmland. The processing industry, however, was geared to produce for the Soviet market and did not use western-standard equipment or packaging. Canneries that are in operation use jars with lids that require a tool to be pried open. These are losing market share in the former eastern bloc and cannot compete with packaging used in historically market economies. Moreover, the government was slow to privatize food-processing plants and so these plants deteriorated due to lack of maintenance and investment.

Opportunities include:

- Several juice plants. With such plentiful fruits, developing this forward linkage is a natural investment opportunity. Both the USDA and the Government of Armenia will assist interested investors in learning more about and developing these opportunities.

- Five or six canneries are available to interested investors. The plants require modernization and the development of marketing channels, both for the inputs and outputs. USDA and Government technical assistance is available.
- A glass bottle manufacturing plant is available for a joint venture investment. Annual volume at the plant is about 11 million bottles and 9 million jars of various sizes.
- Cheese plants are beginning to be established that are large enough to produce commercially viable volumes. These represent both investment and procurement opportunities. Interested investors are urged to contact the USDA office in Yerevan given on the next page.
- There is a market for irrigation equipment, including pumps suitable for farms that are about 300 acres in size.
- While the livestock industry in Armenia is unlikely to ever be export-oriented, it lacks an industry supplying complete animal feeds. Feed mixing and distribution are opportunities for investors.
- There is also no market or marketing channels for mixed fertilizer. Developing the local fertilizer market also represents opportunities for investors.

Project Site

Many of these opportunities are near Yerevan, though some are near the smaller cities of Gyumri, Vanadzor, Echmiadzin, Goris and in the Arrat valley.

Project Status/Timeline

These opportunities will take several years to develop. Armenia's marketing channels are small and not well developed. Government-level food safety standards and inspection systems are being established. However, there is a new air cargo facility at Yerevan's Zvartnots airport that will facilitate shipping out high-value products to Europe and the Middle East.

Equipment and Services

These projects run the gamut from needing improved on-farm equipment and technologies to improved agriprocessing equipment to technical expertise in establishing marketing channels.

U.S. Competitiveness

U.S. agricultural equipment manufacturing firms are known worldwide for their superior agricultural technologies and equipment. USDA has a program to assist U.S. firms in developing opportunities in Armenia. U.S. firms and investors are highly competitive in this area.

Project Financing

The Government of Armenia has a \$100 million fund established by the Liney Foundation that can give grants to help develop beginning ventures that will promote Armenia's development and exports. Through the Armenia Development Agency, interested investors can secure these grants to help offset start-up costs. EBRD and the IFC are available to provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market.

Conclusion

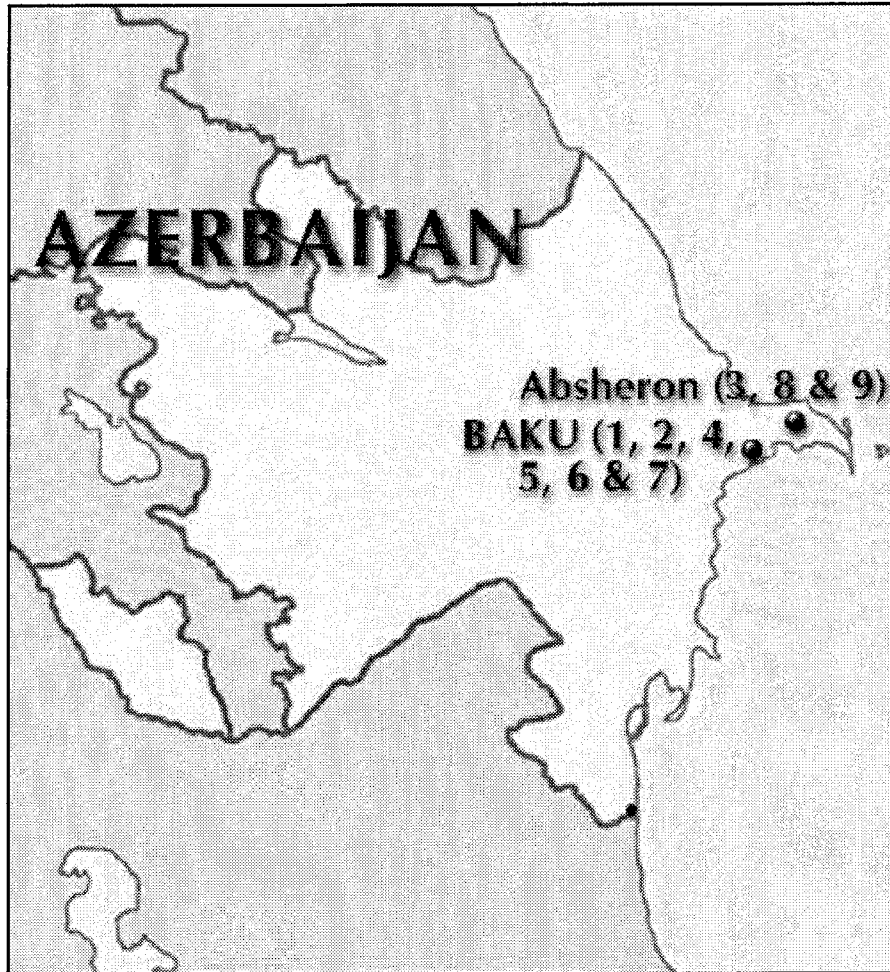
These opportunities are very real. The risk attached to them is lower than one might expect on the surface. Armenia in general appears to be a more risky place to invest than is the case, due in part to a lack of peace and the embargo. However, the Armenian market is stable and the government has shown its continued commitment to reform.

Key Contacts

| | |
|------------------------------|--|
| Organization or Company Name | U.S. Department of Agriculture |
| Contact Person | Bill Miller |
| Title | Director, Armenia Extension Program |
| Address | 48 Charents St. 375025 Yerevan, Armenia |
| Telephone | (374-2) 55-53-15 |
| Fax | (374-2) 151-696 |
| E-mail | Usdaes@arminco.com |

| | |
|------------------------------|---|
| Organization or Company Name | Government of the Republic of Armenia |
| Contact Person | Levon Arevshatyan |
| Title | Deputy Chief of Staff to the Prime Minister |
| Address | Government House 1-38 Republic Square 375010 Yerevan, Armenia |
| Telephone | (374-2) 52-74-02 |
| Fax | (374-2) 151-035 |
| E-mail | |

160



AZERBAIJAN PROJECTS

| MAP NO. | PROFILE NO. | PROJECT NAME | LOCATION |
|---------|-------------|---|------------------------|
| 1. | AZ1 | Oil & Gas Tool Manufacturing | Baku |
| 2. | AZ2 | Baku Port Development | Baku |
| 3. | AZ3 | Absheron Oil Reception | Absheron |
| 4. | AZ4 | Railroad Upgrade Project | Baku to Georgia Border |
| 5. | AZ5 | Baku Water And Sewer Rehabilitation | Baku |
| 6. | AZ6 | Telecommunications Network Improvements | Baku/Nationwide |
| 7. | AZ7 | Agricultural Development And Credit | Nationwide |
| 8. | AZ8 | Urgent Environmental Investment Project | Absheron Peninsula |
| 9. | AZ9 | Absheron Peninsula Environmental Clean-Up | Absheron Peninsula |

161



AZERBAIJAN REPUBLIC

OIL & GAS TOOL MANUFACTURING - PRIVATIZATION

Project Summary

| | |
|--------------------------|--|
| Subsector | Oil & Gas |
| Location | Baku |
| Project Cost | US\$ 5-10 Million (start up cost per investment. 5 or 6 viable investment opportunities) |
| Export Potential | TBD by Investor |
| Project Type | State Industry Privatization |
| Project Executing Agency | Coordinating Council, SOCAR Consortia |



Project Outline

The "AzNEFTKIMMASH" State Company is a state owned enterprise that was the primary manufacturer of tools and equipment for the oil and gas industry in the FSU. "AzNEFTKIMMASH" has retained strong technical capability and continues to manufacture over 80 types of tools and machine for the domestic oil and gas industry to "GOST" standards (an FSU manufacturing quality standard). However, in order to remain a viable manufacturer that can meet the requirements of planned offshore drilling and production operations, an immediate infusion of modern management and manufacturing equipment is required. Toward this end, it is now possible for interested private foreign (American) manufacturers to enter into Revenue Sharing Agreements (RSAs) to join with a branch of AzNEFTKIMMASH to manufacture one or more tools and/or machines. The RSAs will enjoy similar operating privileges (with respect to taxes and profit repatriation) now held by the members of the 13 Production Sharing Agreements (PSAs).

American manufacturers could start their participation by serving the existing domestic oil and gas industry as well as onshore exploration and production operations where "GOST" standard equipment is acceptable. Then after 3 years or so, when serious offshore exploration and production is expected to increase, the RSAs will have had an opportunity to produce tools and machines certifiable by the American Petroleum Institute (API). Most international financiers and insurers of shore drilling and production operations require the use of API certified tools and equipment. We estimate that there are 5 or 6 viable investment opportunities in this sector. This is based on the assumption that a firm would be interested in investing in a component of the "AzNEFTKIMMASH" organization that makes a type of tools or parts.

1102

Technical Description

The types of tools, machines and equipment currently manufactured by AzNEFTEKIMMASH meets up to two thirds of the equipment and machine requirements of typical oil and gas drilling and production operations. The types of manufacturing operations range from sucker rods, all types of pumps, valves, cranes, tools, specialty trucks and many more. See attached list.

Project Site

The prospective manufacturing sites are located in and around Baku.

Project Status/Timeline

Opportunities for RSAs to manufacture equipment are immediate. Early involvement gives a prospective foreign partner a wider choice of items to manufacture, plus get their production in conformance with API Standards prior to the anticipated resumption of major offshore activity in 3 or 4 years.

Equipment and Services

Expected initial investments in tool and equipment manufacturing operations would include opportunities for the export of ("higher tech") modern machine tools, specialized materials and management and technical expertise.

U.S. Competitiveness

American manufacturers and service providers are in a very competitive position to create successful RSA's in the tool and equipment privatization schemes being put forward.

Project Financing

Estimated investments to form a successful operational RSA for manufacturing one or two types of tools or machines is estimated at between \$5 and \$10 million. Possible funding sources to support potential American manufacturers in establishing an RSA include the IFC and the EBRD.

Conclusion

The combination of a strong future demand for oil and gas tools and equipment in the region, coupled with Government of Azerbaijan to support the creation of RSA's suggests a potentially attractive investment opportunity for American manufacturers to gain a strong presence in the regional market for oil and gas tools and equipment. Also, it is reasonable to assume that those manufacturers supporting the re development and re vitalization of the existing local manufacturing sector, may find themselves well positioned to also sell imported (high tech) equipment and materials to both local and foreign oil and gas producers in the region.

Key Decision Makers

| | |
|------------------------------|-----------------------------------|
| Organization or Company Name | AzNEFTEKIMMASH |
| Contact Person | Sabir Kuliyeu |
| Title | First Vice President |
| Address | 50, Moscow qv., Baku 30033 |
| Telephone | 994-12-93-76-84 / 994-12-98-57-79 |
| Fax | 994-12-93-39-68 |
| E-mail | NA |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | Coordinating Council SOCAR Consortia |
| Contact Person | Wayne Walz |
| Title | Executive Secretary |
| Address | 5 Istiglaliyyat, Baku, Azerbaijan |
| Telephone | 994-12-97-14-28 |
| Fax | 994-12-97-14-22 |
| E-mail | wwalz@aiocaz.com |

1204



AZERBAIJAN REPUBLIC

BAKU PORT DEVELOPMENT

| Project Summary | |
|--------------------------|-----------------------------------|
| Subsector | Ports |
| Location | Baku |
| Project Cost | US\$ 44 Million |
| Export Potential | US\$ 23 Million |
| Project Type | Port Rehabilitation |
| Project Executing Agency | Baku International Sea Trade Port |



Project Outline

This project would rehabilitate the port facilities at Baku to ensure its autonomous and profitable status. Trade facilitation will be improved by increasing the efficiency of the port and Caspian Shipping Company, reviewing legal and regulatory networks, and removing trade barriers. EBRD is providing a loan of \$30.7 million.

Technical Description

The project aims to:

- improve structures and equipment
- restructure organization of the port
- review tariff structures, and
- simplify procedures to increase efficiency

The physical part of the project will consist of:

1. Improvements to the ferry terminal, and
2. Improvements to the general and bulk cargo piers as well as the provision of new equipment to facilitate container handling.

165

Project Site

The project is located at Baku port in Azerbaijan.

Project Status/Timeline

EBRD has already approved a \$30.7 million loan. The project has clearly identified financing sources and the international procurement of services and equipment is expected to commence before the end of 1999. Port improvements will continue till the year 2001.

Equipment and Services

Expected requirements relevant are:

- Site Work
- Fencing/Utilities/Lighting
- Administrative/Gate Building
- Yard Paving
- Crane Refurbishment
- Spreaders
- Toploaders
- Hostlers (Yard Tractors)
- Bombcarts (Yard Chassis)
- Pickup Trucks
- Miscellaneous Vehicles
- Yard/Office Hardware & Software
- Generators

U.S. Competitiveness

U.S. competitiveness is likely to be moderate to good since the project will have open international procurement. There will be stiff competition from German firms for most of the mechanical and electrical equipment to be procured for this project. The technical assistance work may be part of tied-financing from EU TACIS. U.S. companies may also be competitive in bidding for procurement and works-supervision contracts.

Hele

Project Financing

| | |
|--------------------------|----------------|
| EBRD | \$30.7 million |
| Islamic Development Bank | \$ 6.0 million |
| EU TACIS | \$ 1.8 million |
| Government of Azerbaijan | \$ 5.0 million |

Conclusion

The port will be supporting increasing volumes of traffic once the Baku-Supsa pipeline becomes fully operational. U.S. firms should have a moderate to good chance to supply equipment and services because of an international competitive bidding process.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Baku International Sea Trade Port |
| Contact Person | Aidyn Mamedov |
| Title | General Director |
| Address | Uz. Hajibeyov Street, 72, 370010, Baku |
| Telephone | 994-12-93-02-68 |
| Fax | 994-12-93-36-72 |
| E-mail | |

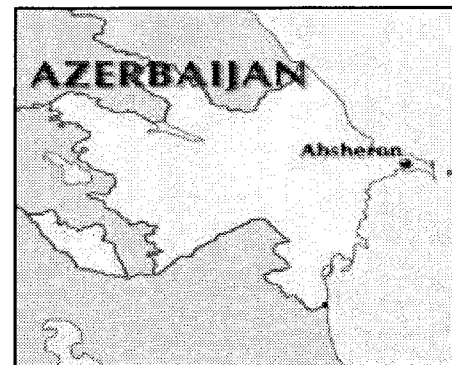
| | |
|------------------------------|---------------------------------------|
| Organization or Company Name | Baku International Sea Trade Port |
| Contact Person | Soltan Kazimov |
| Title | Chief Engineer |
| Address | Uz. Hajibeyov Street, 72 370010, Baku |
| Telephone | 994-12-93-02-68 |
| Fax | 994-12-93-36-72 |
| E-mail | |

1167

AZERBAIJAN REPUBLIC

PORT REHABILITATION — ABSHERON OIL RECEPTION

| Project Summary | |
|--------------------------|-----------------------------------|
| Subsector | Ports |
| Location | Absheron |
| Project Cost | US\$25 Million |
| Export Potential | US\$ 5 Million |
| Project Type | Port Rehabilitation |
| Project Executing Agency | Baku International Sea Trade Port |



Project Outline

This project would rehabilitate the port facilities at the oil reception port north of Baku on the Absheron Peninsula. The existing slips can offload approximately 10 million tons per year. Rehabilitation would increase port capacity to 20 million tons (150 million barrels) per year.

Technical Description

The existing oil reception port at Absheron (north of Baku on the Absheron Peninsula) has four slips for unloading the small (5,000 ton) tankers that transport oil on the Caspian Sea. Two of the existing slips are operational and two are in need of rehabilitation before they can resume service. Under normal full working conditions, each slip can support the off loading of 5 million tons of oil per year. Without rehabilitation the existing two slips can offload approximately 10 million tons per year. After rehabilitation, port capacity will be increased to 20 million tons per year (150 million barrels).

It is expected that the amount of oil received from Kazakhstan by ship may increase significantly in the coming years. Recent historical amounts were as follows:

| | |
|------|----------------------------|
| 1997 | 1.2 million tons |
| 1998 | 2.4 million tons |
| 1999 | 8 million tons (projected) |

Rehabilitation is required for all parts of the port including guard breakwater, auxiliary moorage, channel (deepening for reception of tankers of 12 thousand tons), and piers themselves. The modernization will happen in two stages:

Stage 1

Modernization of guard breakwater: The breakwater is divided into root, middle and head parts and all three parts are to be modernized.

Stage 2

Oil piers 1 and 3: Each oil pier consists of joining stockade, operative part, intermediate and head ridges on Ferro-concrete prismatic piles. Upper construction of the high part of the pier is made of tee-beam blocks and the upper construction of operative part is made of ferro-concrete walls and that of monolithic ferro-concrete pile work. Various kinds of construction services, equipment and materials (mainly for reconstruction and/or strengthening of shore facilities as well as of piers) will be required to complete the second stage of modernization.

To restore port reception capacity, a Japanese firm has secured funding support from the OECF to support port rehabilitation efforts.

Project Site

The project location is on the Absheron Peninsula, north of Baku, in the existing oil reception port.

Project Status/Timeline

Pending final arrangements by the Japanese firm planning to carry out the port rehabilitation effort, work could start as early as 1999 and probably take one to two years.

Equipment and Services

Rehabilitation is required for all parts of the port including guard breakwater, auxiliary moorage, channel (deepening for reception of tankers of 12 thousand tons), and piers themselves. Expected project requirements relevant to U.S. exporters would be mechanical and electrical equipment used for offloading tankers.

U.S. Competitiveness

U.S. competitiveness is likely to be fair at best in this project because the project is largely dependent on the terms of the Japanese credit funding the works. Under typical OECF financing arrangements, at least half of the credit will have to be applied to goods and services sourced in Japan. American firms may have some opportunities to export oil handling and pumping equipment.

Project Financing

It is anticipated that a Japanese OECF credit of \$25 million will support the rehabilitation project, including all foreign procurement. Additional financing in undetermined amounts will come from local sources.

Conclusion

The project's viability depends on growth of the market for oil shipped to Baku from Kazakhstan. International procurement will depend largely on the terms of the Japanese credit, and so U.S. competitiveness is fair at best. American firms may have some export opportunities to export oil handling and pumping equipment.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Baku International Sea Trade Port |
| Contact Person | Aidyn Mamedov |
| Title | General Director |
| Address | Uz. Hajibeyov Street, 72, 370010, Baku |
| Telephone | 994-12-93-02-68 |
| Fax | 994-12-93-36-72 |
| E-mail | |

| | |
|------------------------------|---------------------------------------|
| Organization or Company Name | Baku International Sea Trade Port |
| Contact Person | Soltan Kazimov |
| Title | Chief Engineer |
| Address | Uz. Hajibeyov Street, 72 370010, Baku |
| Telephone | 994-12-93-02-68 |
| Fax | 994-12-93-36-72 |
| E-mail | |

170

AZERBAIJAN REPUBLIC

RAILROAD UPGRADE PROJECT

Project Summary

| | |
|--------------------------|--|
| Subsector | Railroad |
| Location | Baku to Georgia Border |
| Project Cost | US\$ 36 Million (EBRD \$20 Million) |
| Export Potential | US\$ 15 Million |
| Project Type | Track Rehabilitation/ Equipment Procurement |
| Project Executing Agency | Azerbaijan State Railways |



Project Outline

Increased demand for rail traffic in support of the oil and gas industry requires immediate upgrading of selected portions of the railroad track between Baku and the Georgia border. The EBRD, together with TACIS and the Government of Azerbaijan, have funded a \$36 million project to rehabilitate some of the worst sections, where safe passage speeds have been reduced to 25 km. per hour.

Technical Description

Primary project elements include:

- 1) Repair and rehabilitation of 60 Km. of existing trackway.
- 2) Placing of fiber optic cable.
- 3) Procurement of equipment including tamping machines and tank (car) washing equipment.

Project Site

The project will take place along the main rail line between Baku and the Georgia border.

171

Project Status/Timeline

Project activities will take place in 1999 and 2000.

Equipment and Services

The significant opportunity for American provision of equipment and services is in the area of equipment sales. American firms can market track laying and tank car washing equipment. Tank cars have to be washed inside as they haul various commodities. Project implementation consulting services are funded by TACIS and therefore not open to American firms.

U.S. Competitiveness

Aside from equipment sales, export opportunities are limited as noted in the previous section. Civil works related to track rehabilitation can be carried out by local forces. Rail procurement from Ukraine and Russia would look to be very cost competitive. The fiber optic cable project component is to be financed by TACIS so U.S. involvement is precluded.

Project Financing

Project financing sources include:

- 1) EBRD \$20 million
- 2) TACIS \$ 7 million
- 3) Government of Azerbaijan \$ 9 million

Conclusion

Based on the nature of the project, coupled with the fact that TACIS funds cannot be spent for American sourced equipment and services, export opportunities for this project are limited to possible sale of specialty equipment. U.S. firms will be competitive in track laying and tank car washing equipment.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|----------------------------------|
| Organization or Company Name | Azerbaijan State Railways |
| Contact Person | Musa Panahov |
| Title | Deputy Chief of Economy |
| Address | 25a, 28 May Street, Baku, 370010 |
| Telephone | 994-12-98-61-27 |
| Fax | 994-12-98-61-27 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | EBRD |
| Contact Person | Lala Goulieva |
| Title | Project Banker |
| Address | 5 Sabir Street, Baku 370004 |
| Telephone | 994-12-97-10-14 |
| Fax | 994-12-97-10-19 |
| E-mail | goulievl@bku.ebrd.com |

AZERBAIJAN REPUBLIC

BAKU WATER AND SEWER REHABILITATION

Project Summary

| | |
|--------------------------|--|
| Subsector | Water Utility |
| Location | Baku |
| Project Cost | US\$100 Million |
| Export Potential | US\$ 75 Million |
| Project Type | Procurement & Investment Opportunities |
| Project Executing Agency | Absheron Regional Water Company |



Project Outline

The Baku water and sewer utility now suffers from over 70 percent loss of its water supply. The World Bank and EBRD have initiated a Phase I project to rehabilitate and upgrade the utility, but the World Bank and the Government of Azerbaijan are already planning a Phase II that will carry on the work of Phase I.

Technical Description

The World Bank and the EBRD have loaned \$80 million to rehabilitate and improve critical units in the water and wastewater systems in danger of immediate breakdown, to increase the involvement of the private sector in managing the water utility, and to establish a fund that will be managed to rehabilitate parts of the system on a prioritized basis. This has included replacing worn out pipes, installing water meters, replacing pumping stations and rehabilitating the drinking water treatment plant and the sewage treatment plant. The Government has contracted a private operator.

This phase of the project is scheduled to end in 2001. Interest in speeding the work and increasing private-sector participation, however, may accelerate the project so that Phase II may begin next year. With water losses so high, much work remains to be done. After the initial \$80 million Phase I is completed, experts believe an additional \$40 million to \$1 billion may be required to bring the utility up to an acceptable level of operation. The World Bank is contemplating a \$100 million loan for Phase II.

Phase II will continue replacing pipes, pumps, and upgrading treatment facilities. However, a very large part of Phase II will emphasize the participation of the private sector. Build-Operate-Transfer schemes are under consideration. The donors and the Government of Azerbaijan will be holding a conference in June in Baku to explore the role of the private sector in operating and managing the utility.

Project Site

Greater metropolitan Baku. The scope of the work to be done is partly a reflection of the size of Baku's population, now estimated at near 3 million. In addition, the growth anticipated that is related to the development of the region's energy reserves buttresses the case for a much improved water utility.

Project Status/Timeline

There still remain some procurement opportunities that will be advertised this year under Phase I. However, Phase II may start as early as 2000 and continue through 2004.

Equipment and Services

A broad array of services and equipment will be required to continue implementing this project. A new private operator, or several private operators, will be competitively selected for the utility. Design services and construction supervision services will also be required to implement the highest priority rehabilitation/upgrade activities. Absheron Regional Water Company will continue to require large quantities of drinking water and sewer pipe to make required repairs. Absheron Regional Water Company will also continue replacing worn out pumps in both systems. The utility will continue to require major upgrades and rehabilitation of the drinking water treatment plant and the sewage treatment plant. This year and next, Absheron Regional Water Company will be advertising for \$2 million to \$3 million of drinking water pipe.

U.S. Competitiveness

The World Bank will require Absheron Regional Water Company to continue using international competitive tenders to secure the goods and services required for this project. U.S. utilities, engineering companies, and design firms are among the best in the world and thus are highly competitive for the service portions of this project. U.S. producers of water and sewer equipment face keen competition from their European counterparts.

176

Project Financing

Financing for Phase I is already in place. For Phase II, very preliminary discussions suggest the World Bank will put in at least \$100 million, in addition to offering political risk guarantees to private investors interested in taking ownership positions. Other donors are likely to participate as well in the next phase of the project.

Conclusion

The greater Baku metropolitan area is in urgent need of having its water and sewer systems repaired and upgraded beyond the resources allocated in Phase I of this project. Unlike other cities in the Caucasus, private investors are interested in the opportunities related to owning part of the water utility that serves such a key city in the energy sector of the Trans-Caspian region. Many elements of this project should also be of interest to U.S. consulting firms and equipment suppliers.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Absheron Regional Water Company |
| Contact Person | A. Asadov |
| Title | President |
| Address | Absheron Regional Water Company Baku, Azerbaijan Republic |
| Telephone | (994-12) 30-01-31 |
| Fax | (994-12) 98-38-14 |
| E-mail | Cdu@azevt.com |

| | |
|------------------------------|--|
| Organization or Company Name | World Bank |
| Contact Person | Jan Drozd |
| Title | Task Manager |
| Address | The World Bank, ECSIN 1818 H Street, NW Washington, DC 20433 |
| Telephone | (202) 473-2348 |
| Fax | (202) 522-1165 |
| E-mail | Jdrozd@worldbank.org |

AZERBAIJAN REPUBLIC

TELECOMMUNICATIONS NETWORK SYSTEM IMPROVEMENTS

Project Summary

| | |
|--------------------------|---|
| Subsector | Telecommunications |
| Location | Baku/Nationwide |
| Project Cost | US\$ 467 Million |
| Export Potential | US\$ 200 Million |
| Project Type | Telephone Network Expansion and Modernization |
| Project Executing Agency | Ministry of Communications |



Project Outline

The Azerbaijan Ministry of Communications plans to expand and modernize its telecommunications network. Funding will come from local internal sources, foreign investment and credits. Partial foreign ownership of joint ventures in some market sectors will be encouraged. It is suspected that the Ministry will retain full control and revenue from long distance calling services.

Technical Description

Planned development of the telephone network from present to 2004 includes the following:

- 1) Increase the number of telephone lines in the network from 794,000 (end of 1998) to 1,560,000.
- 2) Increase the level of digitalization of the network from 23% at the end of 1998 to 100% by the end of 2001.

Project Site

Project activity will take place nationwide. The primary business focus area is in Baku.

Project Status/Timeline

Project opportunities related to the Ministry's current development program are immediate through 2004.

Equipment and Services

Projected program expansion objective provides a significant opportunity to sell a wide range of telecommunication equipment as well as provide some technical services. Possible American equipment procurement will include:

- 1) Switching equipment
- 2) Satellite communications equipment
- 3) Fiber Optic Cables

U.S. Competitiveness

American firms should be in a good position to supply switching, satellite communications equipment as well as fiber optic cables. Interested companies will need to check if there are in prohibitions to selling US equipment in high technology areas to Azerbaijan at the time of procurement.

Project Financing

The Ministry is looking for foreign joint-venture partners and banks to help finance this project as follows:

- | | |
|--|------------------|
| 1) Internal Ministry resources | \$ 467.8 Million |
| 2) Investment from Joint Venture Partners: | \$ 102.0 Million |
| 3) Credits: | \$ 104.4 Million |

Conclusion

Real opportunities exist for the sale of telecommunications equipment, but opportunities to enter into joint venture arrangements will have to be considered carefully on a case-by-case basis. Based on conversations with Ministry officials, no foreign joint venture partner will be allowed to hold more than 49% of any JV enterprises as the Ministry is committed to retaining State control of all components of the telecom network, a potential problem for attraction of foreign investment.

Key Decision Makers

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | Ministry of Communications |
| Contact Person | Nadir Ahmadov |
| Title | Minister |
| Address | 33, Azerbaijan Avenue, 3701139, Baku |
| Telephone | 994-12-93-00-04 |
| Fax | 994-12-14-24-92 |
| E-mail | NA |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | Ministry of Communications |
| Contact Person | Gismat Ibrahimov |
| Title | Executive Director |
| Address | 33, Azerbaijan Avenue, 3701139, Baku |
| Telephone | 994-12-98-61-74 |
| Fax | 994-12-98-42-85 |
| E-mail | behm@azerin.com |

AZERBAIJAN REPUBLIC

AGRICULTURAL DEVELOPMENT AND CREDIT

Project Summary

| | |
|--------------------------|-------------------------|
| Subsector | Agriculture |
| Location | Nationwide |
| Project Cost | US\$ 35 Million |
| Export Potential | US\$ 15 Million |
| Project Type | Development Assistance |
| Project Executing Agency | Ministry of Agriculture |



Project Outline

This project represents phase one of an assistance program designed to increase rural incomes and agricultural productivity. The project's objectives are: (a) to create land markets; (b) to develop sustainable rural advisory and information services; and (c) to build a viable rural financial system. The project is estimated to cost \$35 million, financed in large part by the IDA of the World Bank, and will be implemented over a four-year period.

Technical Description

The project would consist of the following components:

- (a) Farm advisory services, building on a pilot project already operating in six raions.
- (b) Rural credit services, under which a Rural Credit Company would be set up to lend World Bank funds to 200 local credit companies, also to be created.
- (c) Land registration services, which would phase in the development of a unified land registration system.
- (d) Institutional strengthening, under which an Agricultural Strategy Unit would report to a high level in the GOA and a Project Management Unit would be institutionalized.

Project Site

The project would be implemented nationwide.

181

Project Status/Timeline

The project was scheduled to be appraised by Bank staff in January of 1999 and go to the Board for approval in April. The project will be implemented over a four-year period.

Equipment and Services

Although the project is still being designed, it is anticipated that implementation will require consulting services in technical assistance, training and management of credit extension activities. Some of the small loans may be utilized for equipment purchases, but this is not likely to represent a significant opportunity.

U.S. Competitiveness

American companies should be competitive in responding to international tenders for technical assistance and training services.

Project Financing

The project is estimated to cost \$35 million, and will be to be supported in part by an IDA concessional loan and grant financing from Japan's PHRD for preparation of the rural credit component.

Conclusion

American companies should be competitive in responding to international tenders for technical assistance services. Participation in this phase could provide an entry to Azerbaijan for American agribusiness companies.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Agriculture, State Land Committee, Ministry of Finance |
| Contact Person | Project Management Unit |
| Title | |
| Address | |
| Telephone | 994-12-989-507 |
| Fax | |
| E-mail | |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | World Bank |
| Contact Person | Roy Southworth |
| Title | Program Team leader, ECSSD |
| Address | 1818 H Street, N.W. Washington, D.C. |
| Telephone | (202) 473-9710 |
| Fax | (202) 614-0697 |
| E-mail | |

AZERBAIJAN REPUBLIC

URGENT ENVIRONMENTAL INVESTMENT PROJECT

Project Summary

| | |
|--------------------------|-----------------------------------|
| Subsector | Environment |
| Location | Absheron Peninsula/ Nationwide |
| Project Cost | US\$ 25 Million |
| Export Potential | US\$ 20 Million |
| Project Type | Technical Assistance |
| Project Executing Agency | State Committee for Ecology |



Project Outline

The project is aimed at restoring Azerbaijan's sturgeon production, support environmental decontamination and strengthen the Azeri environmental management system.

Technical Description

The project consists of the following five components:

- 1) Sturgeon Hatchery (\$9 million) which will restore the capacity of Azerbaijan for the production of sturgeon fingerlings by building a new hatchery.
- 2) Mercury Cleanup (\$8.1 million) which will decontaminate one area which is currently heavily polluted by mercury in a chlor-alkaline production plant in Sumgait city located on the Absheron Peninsula.
- 3) Offshore Oil Field Cleanup (\$5.1 million) which will test cleanup methods on a pilot basis and mitigate existing pollution in one offshore oilfield of the Absheron peninsula.
- 4) Environmental Management (\$1.4 million) which will strengthen the Azeri environmental management system.
- 5) Project Management and Implementation (\$ 0.9 million) which will provide project management and implementation support for the project.

184

Project Site

Project activities will take place nationwide with a focus on the Absheron Peninsula.

Project Status/Timeline

Project activities are expected to commence in 1999 and last for two to three years.

Equipment and Services

Equipment and services to be procured by the project include pollution cleanup equipment, fish hatchery equipment and management and specialized technical services.

U.S. Competitiveness

U. S. Firms should be in a good position to compete successfully for all components of this project.

Project Financing

The total project amount is \$24.5 million, of which \$20 million is provided by an IDA Credit and the remaining \$4.5 million comes from other Azeri sources.

Conclusion

Current environmental conditions look to offer firms specialized in environmental cleanup activities extensive future opportunities. Participating in this project would offer the successful company good market access in the future.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|----------------------------------|
| Organization or Company Name | State Committee for Ecology |
| Contact Person | Rauf Muradov |
| Title | |
| Address | |
| Telephone | 994-12-95-78-97 /994-12-95-68-45 |
| Fax | |
| E-mail | |

| | |
|------------------------------|---|
| Organization or Company Name | The World Bank |
| Contact Person | Conrad Ritter |
| Title | Project Officer |
| Address | 1818 "H" Street, NW, Washington DC, USA |
| Telephone | (202)458-0477 |
| Fax | (202) 614-0696 |
| E-mail | critter@worldbank.org |

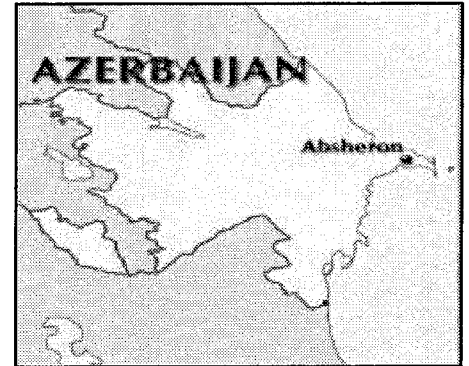
186

AZERBAIJAN REPUBLIC

ABSHERON PENINSULA ENVIRONMENTAL CLEAN-UP

Project Summary

| | |
|--------------------------|----------------------------|
| Subsector | Environment |
| Location | Absheron |
| Project Cost | US\$ 15-25 Million |
| Export Potential | US\$ 10-15 Million |
| Project Type | Environmental Clean-up |
| Project Executing Agency | State Committee on Ecology |



Project Outline

The project involves the cleanup of the ecological situation in Absheron Peninsula and bordering Caspian Sea water area. No sources of financing have been identified yet for the project. It is expected that the cost of cleaning 1 million cubic meters of soil and 10 million cubic meters of water per year is about \$4.5 to 5 million. 3 to 5 such systems will be required to complete the cleanup operation for a total project cost of \$15 to \$25 million.

Technical Description

Chemical and other pollutants have led to a serious ecological situation in both Baku and Absheron Peninsula, as well as of the adjoining waters of the Caspian Sea.

This project involves clean-up of organic oil products from run-off and stratal water, and polluted soil layers in the area up to 10,000 hectares on the Absheron Peninsula; re-cultivation; and rehabilitation of soil bio-productivity with the use of advanced cleaning technology.

Project Site

This project will be situated in the Absheron Peninsula

187

Project Status/Timeline

The project has been included in the National Plan of Action on Environment Protection. No financing has as yet been established. The project requires a feasibility study and is expected to be implemented between 2000 and 2003 depending on the availability of financing.

Equipment and Services

The project will involve the procurement of table gravitation and filtering equipment, contamination clean-up equipment. Construction and installation work will be procured locally. Consulting services will be procured internationally since local companies do not have the requisite expertise to perform environmental clean-ups.

U.S. Competitiveness

U.S. firms should be competitive for environmental clean-up work. Firms working with oil extraction and clean-up in the U.S. have enough experience to design a strategy for this project. There will be competition from Dutch, and British firms in the region.

Project Financing

Sources of finance have not yet been identified. The cost of cleaning 1 million cubic meters of soil and 10 million cubic meters of water per year is about \$4.5 to 5 million. It is expected that 3 to 5 such systems will be required to complete the operation for a total project cost of \$15 to \$25 million.

Conclusion

Azerbaijan was a major producer of oil under the former Soviet Union. Soviet technologies focussed on as much extraction of oil as possible without maintaining proper environmental standards. After independence, the Department of Ecology performed environmental assessments and determined the critical state of the soil. Once financing has been identified, this could be a new area of opportunity for U.S. environmental companies that have experience in dealing with oil spills and contamination.

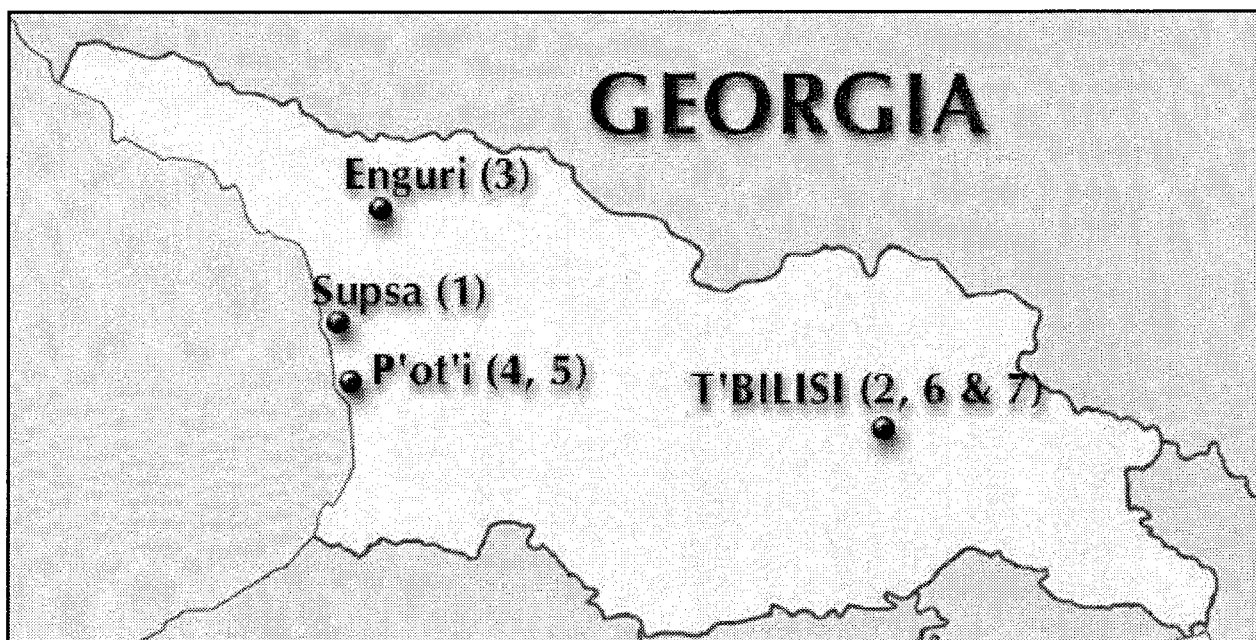
188

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|------------------------------------|
| Organization or Company Name | Ministry of Economy |
| Contact Person | Dr. Talat Kengerly |
| Title | Head of the Department of Ecology |
| Address | The Government House, Baku, 370016 |
| Telephone | (99412) 936 526, 932 025 |
| Fax | |
| E-mail | kangarly@iglim.baku.az |

| | |
|------------------------------|---|
| Organization or Company Name | State Committee on Ecology |
| Contact Person | Dr. R.Muradov |
| Title | Director, Group of Realization of Urgent Ecological Investments |
| Address | #31, Istiglaliyyat str. Baku, 370001 |
| Telephone | (99412) 926 863 |
| Fax | |
| E-mail | veip@ecology.baku.az |





GEORGIA PROJECTS

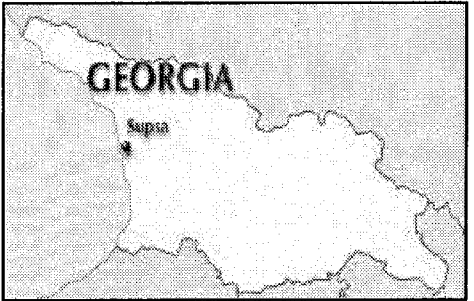
| MAP NO. | PROFILE NO. | PROJECT NAME | LOCATION |
|---------|-------------|--|------------|
| 1. | GR1 | Supsa Oil Refinery | Supsa |
| 2. | GR2 | Privatization/Rehab. of Electricity Generation | Nationwide |
| 3. | GR3 | Rehabilitation Of Enguri Hydropower Plant | Enguri |
| 4. | GR4 | Poti Port Container Terminal | Poti |
| 5. | GR5 | Opportunities At Poti Port | Poti |
| 6. | GR6 | Tbilisi Water And Sewer Rehabilitation | Tbilisi |
| 7. | GR7 | Hotel/Tourism Opportunities | Nationwide |



REPUBLIC OF GEORGIA

SUPSA OIL REFINERY

| Project Summary | |
|--------------------------|--------------------------|
| Subsector | Refining |
| Location | Supsa |
| Project Cost | US\$ 103 Million |
| Export Potential | US\$ 71 Million |
| Project Type | Investment & Procurement |
| Project Executing Agency | GIOC |



Project Outline

This project consists of the design and construction of a modularized Oil Refinery at Supsa, Georgia that can process two million tons of crude per year. The refinery would produce oil-related products to be exported, used at Poti Port, and also used elsewhere within Georgia. TDA funded a Definitional Mission in 1996 and has funded a follow-on Feasibility Study in 1997. The TDA Feasibility Study is now in progress, including an Environmental Assessment to examine air, groundwater, surface water, wetlands habitat, and coastal and marine issues.

Technical Description

The proposed refinery would export light products, such as gasoline, jet fuel, kerosene, and diesel fuel. Heavy diesel fuel and atmospheric gas oil will be sold as marine fuel at Poti Port. Residual Mazut, approximately 890,000 tons per year, will be consumed within Georgia as fuel for power generation plants.

The GIOC is planning a modularized development program for the Refinery, beginning with two million tons per year and perhaps growing over time to six million tons per year. The initial refinery will be a fully modularized two million tons per year preassembled refiner, shipped from the United States and installed on pile foundations. Tanks for oil storage and finished products will be erected at the site.

The design, construction and implementation of the refinery must be supplied by the Developer.

191

Project Site

The proposed site of the refinery is in Supsa, Georgia located adjacent to the proposed early oil terminal, on land owned by the National Land Commission near Poti.

The site offers a good supporting infrastructure for developing and sustaining the viability of the refinery. Key elements of this local infrastructure are as follows:

- Large power station adjacent to site.
- Major rail link at southern boundary of site.
- Port facilities (Poti) six kilometers nor of site.
- Main highway from Tbilisi to Batumi, one km. west of the site.

Project Status/Timeline

The TDA feasibility Study is expected to be completed in early 1999 and a developer for the Project is expected to be engaged by the GIOC in late 1999. It will require approximately 24 months to procure all the necessary equipment, prepare the site, install equipment and commission the plant for operation.

Equipment and Services

The Project will require the following specific equipment and engineering services that will be open to international procurement:

| | <u>US Potential</u> |
|---|-----------------------|
| • Environmental Engineering Services | - \$ 0.23 Million |
| • Engineering Facility Design Services. | - \$ 3.93 Million |
| <u>Engineering and Technical Services</u> | - \$ 4.16 Million |
| • Site Preparation | - \$ 0 Million |
| • Piling and Foundation | - \$ 0 Million |
| • Buildings | - \$ 0.51 Million |
| • Rail Unloading Facilities | - \$ 0.98 Million |
| • Six kilometers of product pipeline | - \$ 1.13 Million |
| • Crude and product storage Tanks | - \$ 20.70 Million |

192

| | | |
|--|---|-------------------------|
| <u>Construction Services</u> | - | <u>\$ 23.32 Million</u> |
| • Modularized Process Units | - | \$ 41.40 Million |
| • Wastewater Treatment Plant | - | \$ 0.30 Million |
| • Nitrogen Plant and Storage | - | \$ 0.90 Million |
| • Initial Catalyst Charge | - | \$ 0.96 Million |
| <u>Plant Modularized Units</u> | - | <u>\$ 43.56 Million</u> |
| <u>Total Refinery Costs (US Potential)</u> | - | <u>\$ 71.04 Million</u> |

U.S. Competitiveness

The GIOC plans are to obtain this refinery, including design, construction, plants and equipment from the U.S. companies.

Project Financing

The total project cost is as follows:

| | | <u>Total Cost</u> |
|---|---|-------------------------|
| • Environmental Engineering Services | - | \$ 0.23 Million |
| • Engineering Facility Design Services. | - | \$ 4.37 Million |
| <u>Engineering and Technical Services</u> | - | <u>\$ 4.60 Million</u> |
| Site Preparation | - | \$ 0.75 Million |
| Piling and Foundation | - | \$ 1.50 Million |
| Buildings | - | \$ 0.85 Million |
| Rail Unloading Facilities | - | \$ 1.30 Million |
| Six kilometers of product pipeline | - | \$ 2.25 Million |
| Crude and product storage Tanks | - | \$ 23.00 Million |
| <u>Construction Services</u> | - | <u>\$ 29.65 Million</u> |
| • Modularized Process Unites | - | \$ 41.40 Million |
| • Wastewater Treatment Plant | - | \$ 1.00 Million |
| • Nitrogen Plant and Storage | - | \$ 1.00 Million |
| • Initial Catalyst Charge | - | \$ 0.96 Million |

| | | |
|--------------------------------|---|--------------------------|
| <u>Plant Modularized Units</u> | - | <u>\$ 44.36 Million</u> |
| <u>Total Refinery Costs</u> | - | <u>\$ 78.61 Million</u> |
| <u>Total Project Costs</u> | - | <u>\$ 103.24 Million</u> |

The GIOC is expecting the U.S. firms that are members to finance the construction of the refinery. The U.S. firms would also initially provide for its commissioning and operation.

The GIOC has already made contacts with some U.S. firms, but has not completed negotiations with any firms as of this date.

Conclusion

Some of the U.S. oil companies think that the refinery is needed to supply the Georgia Market and surrounding countries. Other U.S. oil companies feel that it is not needed, while some experts question the site at Supsa as the optimal location of a refinery within Georgia. The initial results from the TDA Feasibility Study indicate that the refinery is a viable project.

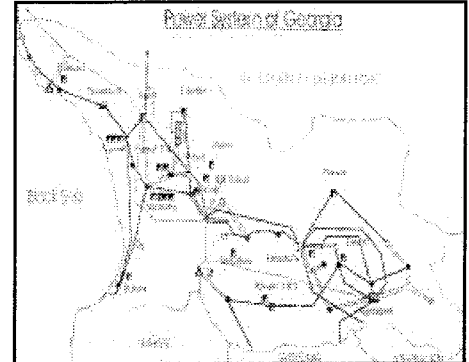
Key Decision Makers

| | |
|------------------------------|------------------------------------|
| Organization or Company Name | Georgia International Oil Company |
| Contact Person | Giorgi Chanturia |
| Title | President |
| Address | 7 Freedom Square, Tbilisi, Georgia |
| Telephone | (995-32) 93-56-94 |
| Fax | (995-32) 93-57-44 |
| E-mail | Gioedir@mail.global-erty.net |

REPUBLIC OF GEORGIA

PRIVATIZATION/REHAB. OF ELECTRICITY GENERATION ASSETS

| Project Summary | |
|--------------------------|---|
| Subsector | Energy |
| Location | Nationwide |
| Project Cost | To Be Determined by the Market |
| Export Potential | Open |
| Project Type | Investment Opportunity /Procurements |
| Project Executing Agency | Merrill Lynch, Ministry of State Property |



Project Outline

The Government of Georgia is privatizing its electricity generation assets through international tenders managed by Merrill Lynch. Once units are privatized, the new owners will need to purchase equipment and engineering services to improve operational efficiency.

Technical Description

With support of the international donor community, the Government of Georgia is restructuring the nation's power sector. In the electricity subsector, the Government has unbundled transmission, generation and distribution into separate enterprises and organizations. Nineteen smaller hydro power plants totaling 90 MW were privatized before a mass privatization process began in 1995, and four hydro power plants totaling about 180 MW have been leased to private operators. Most of Georgia's remaining hydro and thermal generation units have been transformed into joint stock companies with 100 percent of the shares owned and operated by Sakenergo-Generation. The distribution enterprises have also been transformed into joint stock companies, with 100 percent of the shares controlled by the relevant local municipalities.

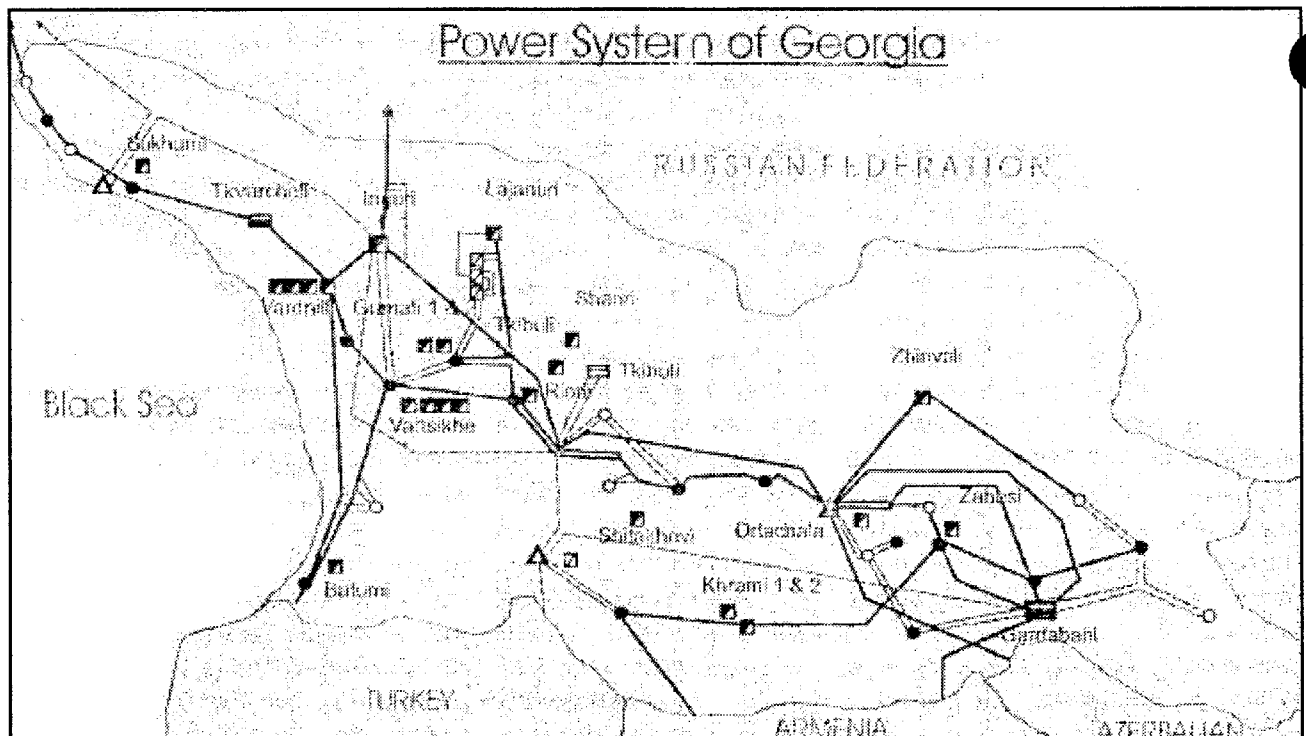
The Government has selected Merrill Lynch to conduct the international tendering for the assets. Merrill Lynch sold a 75 percent interest in Telasi, the Tbilisi Distribution Company, to AES Corporation, a U.S. company. Merrill Lynch is now preparing to bundle Georgia's hydro and thermal generation facilities and sell the bundles. Bidders will be able to buy up to 75 percent interest from the Government in the bundled facilities, or bid on 25 - 30 year management contracts.

The facilities that will be bundled include: Gumati (a 23 MW hydro facility); Khrami I and II (a 113 MW hydro facility); Lajanuri (a 12 MW hydro facility); Ortachala (an 18 MW transformer facility); Rioni (a 49 MW hydro facility); Shaori (a 38 MW hydro facility); Tbilisi Tbokseli (a 18 MW thermal facility); Tbilresi (1,070 MW); Tkibuli (a 80 MW hydro facility); Vartsikhe Cascade (a 184 MW group of hydro facilities); and Zahesi (a 44 MW Hydro facility). Merrill Lynch will announce how these units will be bundled later this year.

While AES has encountered some problems, the Government is committed to reforming the power sector to attract foreign investors. There is now an independent regulatory commission, the NERC, that grants licenses and regulates tariffs. Moreover, the Government has increased tariffs over time and partially eliminated subsidies. Now the Government is implementing projects that are increasing collection rates.

Project Site

The assets to be bundled are scattered across the country (see map).



196

Project Status/Timeline

Merrill Lynch expects to move ahead with tenders later this year. The privatization process in this subsector likely will take the next 2 - 4 years to be complete.

The process of preparing binding bids is as follows. A draft Sale and Purchase Agreement is being prepared by the law firm Latham and Watkins on behalf of the Government. Binding bids must be accompanied by a mark up of this Agreement. Buyers should complete due diligence studies prior to submitting a binding bid. Consortiums are welcome to submit binding bids. The bidding process will consist of three steps: qualification; preliminary non-binding bidding; and final bidding.

Equipment and Services

Complete descriptions of the assets to be privatized can be obtained from Merrill Lynch upon an expression of interest. Since these assets have not received routine investments to offset depreciation since the mid-1980s, suppliers of maintenance equipment and replacement parts for hydro and thermal plants should expect opportunities as soon as the assets are privatized.

U.S. Competitiveness

AES, a U.S. utility company, purchased the first electric power asset sold via international tender by the Government of Georgia. To qualify to bid, a buyer must have prior experience in operating a hydro or thermal power facility of similar size to the one(s) being bid for. The Government of Georgia has shown a marked preference for U.S. investors and U.S. suppliers of goods and services.

Project Financing

Financing is the responsibility of the bidder. Favorable financing packages can be arranged for U.S. companies through OPIC, the IFC and the EBRD. All of these institutions exist to promote private-sector investment in developing and emerging markets.

197

Conclusion

The privatization of the electric power generation and distribution sector represents some of the brightest prospects for foreign investment in Georgia. The privatization process is already underway and unlikely to be slow. The Government appears to be highly motivated both to improve the delivery of electricity and to realize the enhanced revenues which privatization of the sector offers.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Merrill Lynch International |
| Contact Person | Luis Vaz Pinto |
| Title | Vice President |
| Address | Ropemaker Place 25 Ropemaker Street London EC2Y 9LY, England |
| Telephone | (44-171) 573-1848 |
| Fax | (44-171) 867-4454 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | Merrill Lynch International |
| Contact Person | Jason M. Schaeffer |
| Title | Analyst |
| Address | Ropemaker Place 25 Ropemaker Street London EC2Y 9LY, England |
| Telephone | (44-171) 867-2320 |
| Fax | (44-171) 892-8622 |
| E-mail | |

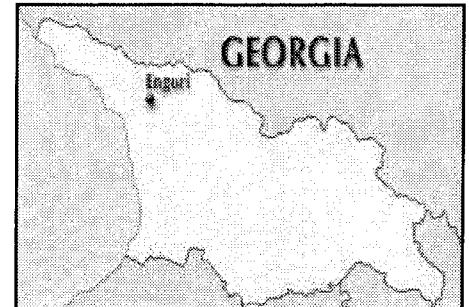
| | |
|------------------------------|---|
| Organization or Company Name | Ministry of State Property Management |
| Contact Person | Shota Keldishvili |
| Title | Vice-Minister |
| Address | 64 Chavchavadze Ave. Tbilisi 380062, Georgia |
| Telephone | (995-32) 29-30-64 |
| Fax | (995-32) 29-27-90 |
| E-mail | Demir@access.sanet.ge |

REPUBLIC OF GEORGIA

REHABILITATION OF ENGURI HYDROPOWER PLANT

Project Summary

| | |
|--------------------------|----------------------------|
| Subsector | Hydropower |
| Location | Northwest Georgia |
| Project Cost | US \$ 39 Million |
| Export Potential | US \$ 10 Million |
| Project Type | Procurement Opportunity |
| Project Executing Agency | Sakenergo & EBRD |



Project Outline

The project aims to rehabilitate the world's largest arch dam to help alleviate the critical power shortage in Georgia. It will support the Government in its ongoing privatization program of the power sector. The Enguri Hydropower Plant and dam are located on Georgia's border with its separatist region of Abkhazia.

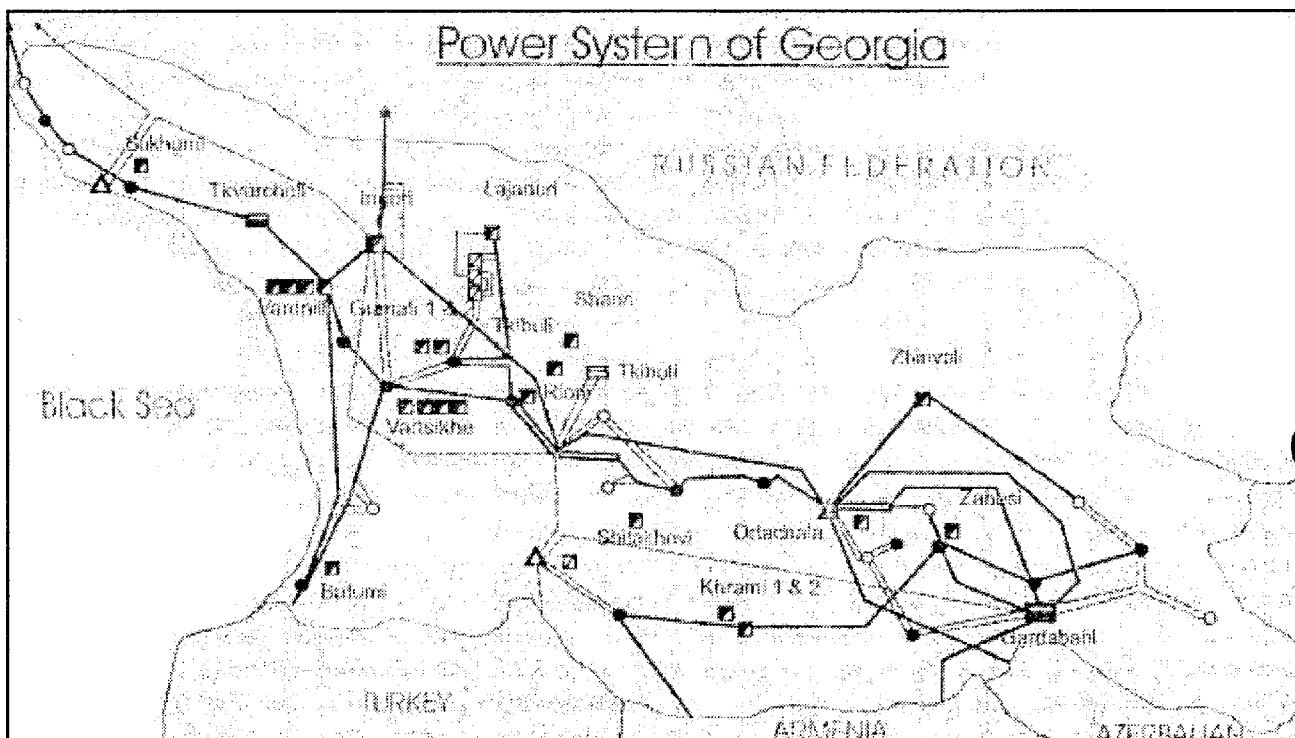
Technical Description

The project's goals are to: support the Government's plans to refurbish the power sector; increase the availability of non-polluting renewable energy; and improve dam and power waterway operational safety. The EBRD loan has been used to restructure the power distribution sector by establishing up to eight joint-stock companies for power distribution. The loan was also used to support the privatization of Telasi, the largest power distribution company. Telasi was sold to AES, a U.S. power company.

Environmental issues that must be addressed at Enguri include waste management, handling and storage of oils, soil contamination, waste-water collection and treatment, and various aspects of worker health and safety.

Project Site

Enguri Hydropower plant is situated in Northwestern Georgia as shown on the map. It is located on the divide with the separatist province of Abkhazia. The conflict in Abkhazia remains unresolved. Although hostilities ceased several years ago, there was an outbreak of violence in May of 1998 in the Gali region of Abkhazia and low grade instances of violence continue. However, the Enguri plant and dam significantly benefits both communities, and is the object of cooperation between them. Consequently it has never figured in the conflict.



Project Status/Timeline

This project is under way. Telasi has been privatized and assistance to the Government on the privatization program is well advanced.

Equipment and Services

Enguri power facility is likely to need equipment to rehabilitate its turbines and other equipment related to generating and transmitting the facility's power. Engineering services, notably environmental engineering services, are most likely to be required.

200

U.S. Competitiveness

U.S. engineering firms will be in the competitive range for the services required, but will face serious competition from European suppliers for the equipment.

Project Financing

The EBRD has made a loan of \$38.75 million to the Government of Georgia. Co-financing will be provided by the European Union and Japan.

Conclusion

This project is part of the Government of Georgia's overall strategy to accelerate restructuring its power sector. U.S. companies are active in this process, and the opportunities exist for U.S. companies to sell services, and in some cases, equipment.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | European Bank for Reconstruction and Development |
| Contact Person | Mariam Megvinetuhutsesi |
| Title | Mission Adviser |
| Address | 7 Niko Nikoladze Street 380008 Tbilisi, Georgia |
| Telephone | (995 32) 92-05-12 |
| Fax | (995 32) 93-13-35 |
| E-mail | Mmegvine@access.sanet.ge |

| | |
|------------------------------|--|
| Organization or Company Name | EBRD |
| Contact Person | Neil McKain |
| Title | Officer |
| Address | One, Exchange Square, London, EC2A 2EH, U.K. |
| Telephone | 44-171-588 4027/28 |
| Fax | 44-171-588 4026 |
| E-mail | Mckainn@ebrd.com |

REPUBLIC OF GEORGIA

POTI PORT CONTAINER TERMINAL

| Project Summary | |
|--------------------------|----------------------------|
| Subsector | Transportation |
| Location | Poti |
| Project Cost | US\$5 - \$6 Million |
| Export Potential | US\$5 - \$6 Million |
| Project Type | Procurement Opportunity |
| Project Executing Agency | Sea-Land Corporation |



Project Outline

Sea-Land Corporation is already active in Poti, operating a container terminal and shipping business since 1995. Sea-Land is planning to refurbish this container terminal to add to their capacity, reflecting the prospects for increased freight as the first “early oil” pipeline delivers oil to the port for transshipment for the first time this spring. Sea-Land’s investment represents good procurement opportunities for U.S. businesses.

Technical Description

The present Sea-Land container terminal is small. It uses Berth 7, 210 meters long, with a yard of 2.3 hectares. The container operations rely on the availability of off-dock storage facilities, one of which is operated by Sea-Land’s agent, Cautrex. The container terminal itself is poorly managed and maintained. Low productivity causes long vessel delay and working time. The situation limits annual throughput capacity to about 60,000 Twenty-Foot Equivalent Units (TEU) a year.

With the assistance of TDA’s funding, and using independent engineers (VZM), Sea-Land completed a feasibility study to expand the Port’s container facilities. This Project Profile presents Phase I of that study for development.

By refurbishing and strengthening the existing facility with an investment of \$5 - \$6 million, productivity and capacity can be enhanced a great deal, increasing annual throughput up to 100,000 TEU.

Total and Sea-Land TEU Traffic at Poti Port

| Year | Total | Sea-Land | Sea-land Share |
|------|--------|----------|----------------|
| 1995 | 12,000 | 5,000 | 42% |
| 1996 | 21,000 | 14,000 | 68% |
| 1997 | 43,000 | 20,000 | 47% |

The project has been structured to minimize many of the risks normally associated with a terminal project. Investment will be gradual, geared to demand, and therefore less prone to exposure of volume fluctuation. Implementation will be swift, since a significant improvement can be gained with the immediate equity without the need to engage first in securing debt financing.

Project Site

Poti Port, Republic of Georgia.

Project Status/Timeline

This project is pending final approval by the Ministry of Property. However, Sea-Land and the Ministry of Transport have agreed to the Terms and Conditions of a Sea-Land led common user, container terminal. The Ministry of Property is considering aspects of the project that are related to privatization. Once the Government has given final approval, the project will be phased in over 3 to 5 years.

Equipment and Services

Equipment and services needed include: site work; fencing, utilities and lighting; administration/gate buildings; yard paving; crane refurbishment; spreaders; toploaders; hostlers (yard tractors); bombcarts (yard chassis); pickup trucks; miscellaneous vehicles; yard/office hardware and software; and electric generators.

U.S. Competitiveness

Sea-Land is committed to using U.S. suppliers for as much of the equipment and services as possible. This in part, reflects the efforts and expenditures by TDA.

Project Financing

The project will be financed out of Sea-Land's equity funds.

Conclusion

This represents an excellent opportunity for U.S. suppliers of this equipment and engineering/design services.

Key Decision Makers

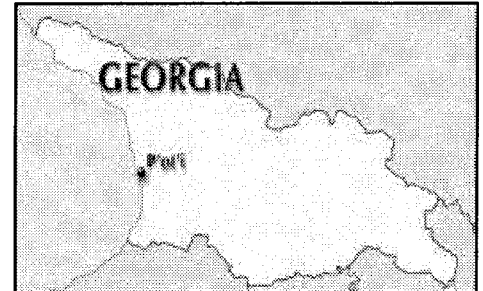
| | |
|------------------------------|--|
| Organization or Company Name | Sea-Land Corporation |
| Contact Person | Richard Nicholson |
| Title | CIS Program Manager |
| Address | Aerostar Hotel, Moscow, Russian Federation |
| Telephone | (7095) 258-2737 |
| Fax | (7095) 961-3237 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | Sea-Land Corporation |
| Contact Person | Dan South |
| Title | Regional Manager, The Caucasus |
| Address | Poti Port, Republic of Georgia |
| Telephone | (995 77) 413-974 |
| Fax | (995 32) 294-663 or 291-963 |
| E-mail | Silkroad@mail.com OR on-the-road@iberiapac.ge |

REPUBLIC OF GEORGIA

OPPORTUNITIES AT POTI PORT

| Project Summary | |
|--------------------------|--------------------------|
| Subsector | Transportation |
| Location | Poti |
| Project Cost | US\$ 30 Million |
| Export Potential | US\$ 15 Million |
| Project Type | Procurement & Investment |
| Project Executing Agency | Several, see below |



Project Outline

Poti is on the Black Sea and now represents Georgia's primary port. The Black Sea port of Batumi lies within the autonomous province of Adjara, while the port of Sukhumi is located in the separatist region of Abkhazia. The oil pipeline terminus at Supsa currently has no facilities to handle non-oil cargoes. While there is much potential at Poti, only the Georgian Pipeline Company and Sea-Land Corporation have had success in developing new or refurbished facilities.

Technical Description

According to local observers, Poti may have actually experienced a decline in freight shipments in 1998. While the port offers much potential, only a limited number of new activities have been able to become established. Crude oil will be coming out of the Georgian Pipeline Company's new Trans-Caucasus pipeline this April. Moreover, Sea-Land Corporation has been able to make progress and represents some solid business opportunities (see following project profile). However, privatization of the Port, or its facilities, has been slow to move forward, and potential investors have been reluctant or unable to move in and rebuild/refurbish existing facilities or establish Greenfield operations. An exception to this is that Mercedes Benz is building a dealership with a small hotel.

Nonetheless, Poti has the long run potential to be a major multimodal cargo hub for the Caucasus. The Port of Poti Authority has been working on privatization with the U.S. Agency for International Development (USAID) for some time. The EU and other Donors believe that the port's facilities should be privatized in a piecemeal fashion, while USAID has taken the position that the entire port be privatized as a whole entity. The Government of Georgia has not shown any urgency in privatizing the port.

A general description of the Port of Poti follows. The Port can accommodate 70,000 deadweight ton (DWT) vessels. There are 15 berths, with drafts ranging from 5 to 11 meters, and lengths ranging from 85 to 250 meters. The Port has extensive storage facilities, including warehouses for storing general cargo. There is also a container storage area and oil storage tanks.

Projects

While many potential projects have been examined at the port, the following four were considered sufficiently reasonable to present at the Crossroads Conference in May, 1998. They are condensed, because no action on developing these projects has been evident since then.

Project 1. Hotel and Conference Center

Currently, there are few local facilities in the region for lodging and business conferences. There already is the need for a moderately priced Western-style hotel and business center, and such needs are likely to grow. Without adequate facilities, the port's rate of modernization may be impeded. A U.S. Trade and Development Agency (TDA) Definitional Mission determined that a 50- to 100-room hotel with 10 to 20 fully equipped office facilities is potentially realizable in the near future.

There is an existing 275-room hotel, at Maltakva, in the area. Conlan & Associates, a U.S.-based development contractor, in cooperation with Raddison Hotels, has expressed interest in modernizing the facility, but there has been no activity evident as of this date. The Definitional Mission concluded that the site could not be salvaged.

Project 2. Cotton Terminal

Another possible project at Poti is a cotton terminal. Until recently, Uzbekistan, a major exporter of cotton, shipped most of its cotton through Russia to Europe. Uzbekistan has agreed to ship up to 500,000 T/Y of cotton through Poti to markets in Europe and the Mediterranean. Despite expectations of sharp growth in cotton shipments, no actions have been taken to modernize or build a new cotton terminal.

Project 3. Grain Terminal

In 1996, more than 570,000 metric tons of grain was imported into the region through Poti. The EBRD indicated an interest in financing a grain terminal at the port to handle increasing shipments. However, no actions are apparent on building a new terminal.

The Port Authority had been planning to construct a grain terminal complex at Berth #15 at Poti. However, a feasibility study conducted by the EBRD indicated that developing the complex at Berth #8 would significantly reduce investment costs. The TDA Definitional Mission agreed with these findings.

2000

Project 4. Perishable-Cargo Terminal

There are no fixed-refrigeration assets at the port. All perishable materials are stored on rolling-stock refrigerator units (with their own internal generators and chillers) that pass through the facilities until they are transshipped elsewhere. A refrigeration facility at the port would offer immediate efficiency gains in port operations, as well as creating small business opportunities in intermediate food processing and agribusiness.

The United States & Foreign Commercial Service (FCS) estimates that food processing equipment exports to Georgia from all sources reached a total value of \$4.5 million in 1997. The FCS predicts an ongoing 60 percent growth over the next several years as Georgian products gain increasing market share internationally. However, the crisis in Russia, Georgia's main market, has significantly dampened growth in all exports, including processed food products. Georgia grows a wide variety of high-value agricultural produce including: grapes; citrus crops; apricots; tea; and nuts.

The Port Authority and the Minister of Transportation are seeking private investors to undertake development of a perishable-cargo terminal, which will be located at Berth #14—conveniently near the Sea-Land Terminal at Berth #12. A wharfside refrigerated warehouse to service imported cargo, as well as a quick freezing facility, might also be included in this project.

Project Site

Poti is a small city with a population of 51,000. Local industries include a meat processing plant, a shipyard, and some light manufacturing. The city's geographic location and its port, however, are what make it a commercially important location.

Project Status/Timeline

No realistic timelines exist for the above projects. U.S. investors are urged to be cautious in their approach to developing a project at Poti Port. While there is apparently strong support from the Government of Georgia to attract foreign investment into the Port, conflicting interests and an evolving legal and regulatory framework make progress difficult. The crisis in Russia, the low price of oil, and depressed commodity prices in general make predicting a realistic investment timeline impossible.

Equipment and Services

Interested investors are urged to review TDA's Definitional Mission Report and the Crossroads Briefing Book for detail. At that time the estimated costs for the hotel project were \$1.5 million - \$2.5 million, the estimated costs for the cotton terminal were \$7.5 million - \$10 million, the estimated costs for the grain terminal were \$15 million - \$20 million, and the estimated costs for the perishable-cargo terminal were \$15 million - \$20 million.

U.S. Competitiveness

Estimates on the above projects suggest that, if implemented, they could represent \$7.5 million in U.S. exports. These estimates are based on extrapolations from other similar projects.

Project Financing

If an investor is able to assemble a credible feasibility study, secure solid support from the Port Authorities, and the National Government, the EBRD, IFC, and OPIC all are available to secure or help secure financing at the least cost and with the most guarantees.

Conclusion

Discussions about developing Poti Port as a multimodal cargo hub have moved in tandem with discussions about Georgia's role as a transportation corridor between Europe and the Central Asian Republics. Progress has been slower than predicted by many experts, but progress is being made. The first "early oil" will reach Poti about the time of this Conference, Sea-Land has a viable and growing container business, and there is still some movement towards privatizing the Port. Investors will need to take a long-term approach to any projects at Poti.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|--|
| Organization or Company Name | Sea Port of Poti |
| Contact Person | Jemal Inaishvili |
| Title | General Manager |
| Address | 52 D. Agmashenebeli St., Poti, Georgia |
| Telephone | (995-39) 32-06-60 |
| Fax | (995-39) 32-06-30 |
| E-mail | Ina@caucasus.net |

| | |
|------------------------------|------------------------|
| Organization or Company Name | Sea Port of Poti |
| Contact Person | Devi Gvalia |
| Title | Deputy General Manager |
| Address | Same as above |
| Telephone | (995-39) 32-21-31 |
| Fax | (995-39) 32-21-31 |
| E-mail | |

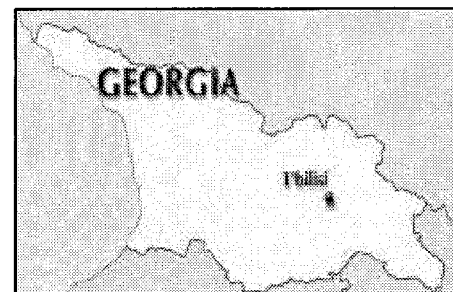
| | |
|------------------------------|--|
| Organization or Company Name | Sea-Land Inc. |
| Contact Person | Richard Nicholson |
| Title | CIS Program Manager |
| Address | Aerostar Hotel, Moscow, Russian Federation |
| Telephone | (7095) 258-2737 |
| Fax | (7095) 961-3237 |
| E-mail | |

REPUBLIC OF GEORGIA

TBILISI WATER AND SEWER REHABILITATION

Project Summary

| | |
|--------------------------|-------------------------------------|
| Subsector | Water Utility |
| Location | Tbilisi |
| Project Cost | US\$ 300 Million |
| Export Potential | US\$ 10-20 Million |
| Project Type | Procurement opportunities |
| Project Executing Agency | Tbilisi Water and Sanitation Agency |



Project Outline

To rehabilitate and improve critical units in the water and wastewater systems in danger of immediate breakdown, to increase the involvement of the private sector in managing the water utility, and to establish a fund that will be managed to rehabilitate parts of the system on a prioritized basis.

Technical Description

The goal of the project is to help the Tbilisi Water and Sanitation Agency (i.e., Tbilikalcanal) become better managed as a financially autonomous and sustainable institution capable of providing good quality water and basic sanitation services to Tbilisi. The project has three main components:

- Investing in urgently needed improvements--rehabilitating and improving those parts of the drinking water and waste water systems that are in immediate danger of failure. This includes key pipe sections, treatment plants, the main water tunnel, and strategic pumps.
- Secure a private sector operator under contract to Tbilikalcanal to improve management so that the utility is more efficiently organized and operated.
- Establish and manage a fund for future improvements so that the needs of the utility are first analyzed so that the most urgent repairs/upgrades are scheduled for early attention while those repairs/upgrades that are less serious or not yet ready for service are scheduled for attention at later dates.

210

Project Site

The project is located in greater Tbilisi, Georgia.

Project Status/Timeline

The World Bank is evaluating the structure of the project, together with the Government of Georgia. Negotiations are scheduled to take place later in the year. Project approval is likely at the end of the year or the beginning of 2000.

Equipment and Services

A broad array of services and equipment will be required to implement this project. A private operator will be competitively selected for the utility. Design services and construction supervision services will also be required to implement the highest priority rehabilitation/upgrade activities. Tbilikalcanal will require large quantities of drinking water and sewer pipe to make required repairs. Tbilikalcanal will also be replacing worn out pumps in both systems. The utility is most likely to require major upgrades and rehabilitation of the drinking water treatment plant and the sewage treatment plant. Moreover, the tunnel that feeds water to the city is in urgent need of repairs.

U.S. Competitiveness

The World Bank will require Tbilikalcanal to use international competitive tenders to secure the goods and services required for this project. U.S. utilities, engineering companies, and design firms are among the best in the world and thus are highly competitive for the service portions of this project. U.S. producers of water and sewer equipment will face keen competition from their European counterparts.

Project Financing

The scope of this project will ultimately require about \$300 million to complete. While the financing is still under negotiation, early indications are that the World Bank will lend \$25 million - \$30 million in IDA funds to the Government. These concessional loans typically require the Government to provide an additional 10 percent to finance the project. There is the possibility that other donors may contribute funding to this project.

Conclusion

Tbilisi is in urgent need of having its water and sewer systems repaired and upgraded. No less important is the management of the utility. Since Tbilisi is one of the key links in the transcaucasus transit route, these needs will become even more important. U.S. consulting firms and equipment suppliers should be interested in many aspect of this project.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Tbilisi Water and Sanitation Utility (Tbilikalcanal) |
| Contact Person | Zuab Gongadze |
| Title | Director |
| Address | 33, 1 st Lane, Kostava Street Tbilisi, Georgia |
| Telephone | (995-32) 94-21-84 |
| Fax | (995-32) 98-26-07 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | World Bank |
| Contact Person | Jan Drozd |
| Title | Task Manager |
| Address | ECSIN, The World Bank 1818 H St. NW Washington, D.C. 20433 |
| Telephone | (202) 473-2348 |
| Fax | (202) 522-1165 |
| E-mail | jdrozdz@worldbank.org |

| | |
|------------------------------|---|
| Organization or Company Name | World Bank Resident Mission in Georgia |
| Contact Person | Zurab Javakhishvili |
| Title | Project Officer |
| Address | 18A Chonkadze Street Tbilisi Georgia |
| Telephone | (995-32) 99-04-48 |
| Fax | (995-32) 99-52-88 |
| E-mail | Nmikeladze@worldbank.org |

REPUBLIC OF GEORGIA

HOTEL/TOURISM OPPORTUNITIES

Project Summary

| | |
|--------------------------|------------------------|
| Subsector | Hotel/Tourism |
| Location | Nationwide |
| Project Cost | US\$ 30 - 50 Million |
| Export Potential | Open |
| Project Type | Investment Opportunity |
| Project Executing Agency | Not Applicable |



Project Outline

The Republic of Georgia offers some very good opportunities to open new guest lodging serving several different niches in the hospitality industry. In Tbilisi, there is an immediate need for three to four star lodging to serve an increasing volume of business tourists in the near term. Over the longer term, there exist good opportunities nationwide to open small hotels and guesthouses at the two to three star level (U.S. standards) to serve a nascent but growing tourism industry.

Technical Description

A feasibility study jointly funded by TDA and Radisson Hotels International for tourism development in Georgia was completed in September 1998. Clearly, there is excess demand for lodging by business tourists in Tbilisi right now. The Sheraton Metechi Palace Hotel charges in excess of \$300/night for a five star accommodation. Local guest houses that can guarantee a hot shower and regular power charge \$120/night for a room with a shared bathroom. More comfortable lodging at these guest houses can cost over \$200/night.

During the Soviet era, Georgia's tourism industry was highly developed, with around 3.5 million tourists per year. The post-independence tourist industry, apart from business travelers, is in transition. The number of visitors barely reaches 100,000 annually and the tourist infrastructure is severely dilapidated. There are, however, good air connections with Europe and Tbilisi via British Airlines, Swissair, Austrian Air, and the local carrier, Georgian Airlines. Hertz has recently opened a car rental agency in Tbilisi. The local tourist industry can build upon Georgia's natural endowments for winter sports, significant historic and religious monuments and locations, and as yet to be developed tourist facilities in their forests and undisturbed mountainous habitats.

Georgia is also noted for its numerous natural hot springs. Now, there is an excellent ski resort hotel at Gydari, which is about an hour by car from Tbilisi.

Aside from Gydari, a significant constraint on the revival of the industry outside of Tbilisi is the unavailability of overnight accommodation sufficient to handle tourists by the bus load.

Project Site

Tbilisi, Poti and perhaps Batumi have an immediate need for accommodations for business tourists. The opportunities for nonbusiness tourism are more spread throughout the country, and include locations like Senaki, Kutaisi, Borjoni, Gori, and Telavi.

Project Status/Timeline

Opportunities for business tourist development are immediate, while those in nonbusiness tourism will need a more careful assessment and preparation.

Equipment and Services

The Republic of Georgia has been advised on the need to develop a Tourism Masterplan. It is a member of the World Tourism Organization. There is a need for tourism consultants to help the Government shape the policy environment to encourage the development of the tourist industry. To serve the immediate needs of business tourists, investors could establish a Greenfield operation, or retrofit an existing property in Tbilisi to serve as a guest house. Specific equipment needs will depend on the market niche to be served by the proposed facility.

U.S. Competitiveness

U.S. firms are competitive in this industry worldwide, and have good opportunities in Georgia. All investors in Georgia should be prepared for an evolving legal and regulatory structure and a tax system that is not transparent.

Project Financing

Project financing is available from commercial sources, the IFC, and from the EBRD.

Conclusion

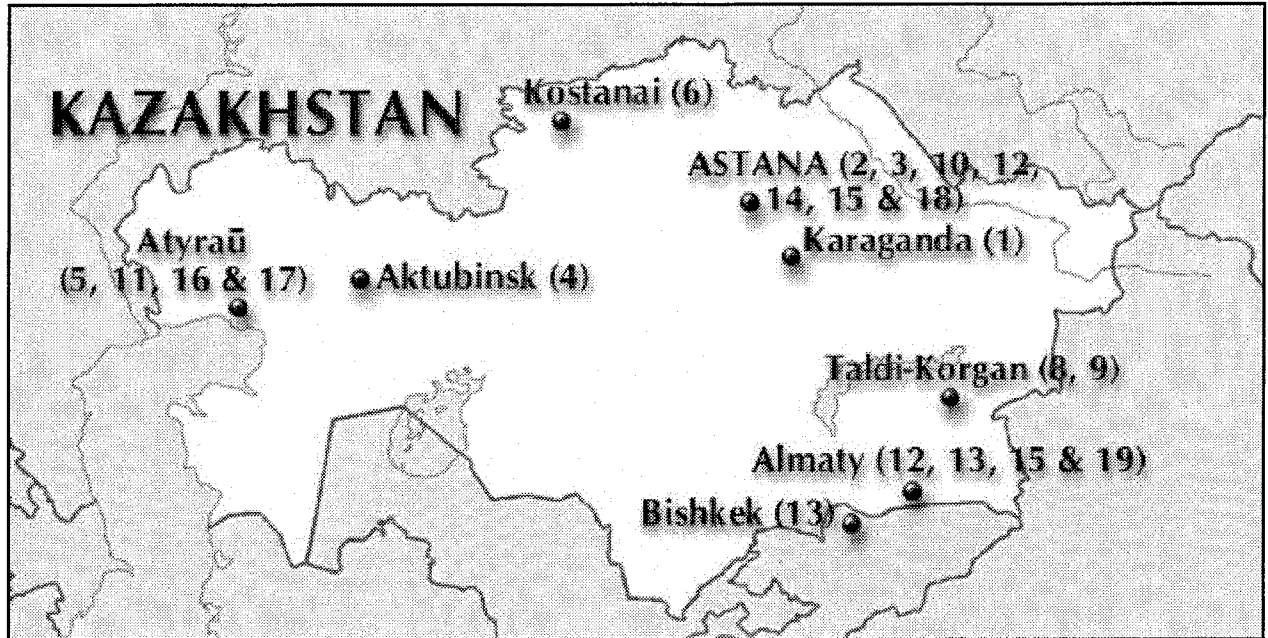
For investors who are willing to operate in an economy that is still in the transition to a market system, the tourism sector in Georgia offers some good opportunities. Investors should be prepared for problems common in transition economies and be willing to take a long-term perspective.

Key Contacts

| | |
|------------------------------|--|
| Organization or Company Name | American Chamber of Commerce in Georgia |
| Contact Person | Leigh Durland |
| Title | President |
| Address | Absolut Bank 8 Ingorokva Street Tbilisi, Georgia |
| Telephone | (995-32) 93-89-23 |
| Fax | (995-32) 99-61-82 |
| E-mail | 104146.2700@compuserve.com amcham-ge@access.sanet.ge |

| | |
|------------------------------|--|
| Organization or Company Name | BETSY'S |
| Contact Person | Betsy Haskell |
| Title | Proprietor |
| Address | 21 Gogebashvili Street Tbilisi, Georgia |
| Telephone | (995-32) 98-95-53 |
| Fax | |
| E-mail | Betsy@2121.ge |





KAZAKHSTAN PROJECTS

| MAP NO. | PROFILE NO. | PROJECT NAME | LOCATION |
|---------|-------------|--|-------------------|
| 1. | KZ1 | Coalbed Methane Capture & Use | Karaganda |
| 2. | KZ2 | Modernizing The Electric Power System | Nationwide |
| 3. | KZ3 | Akmolinsk Electricity Distribution | Astana |
| 4. | KZ4 | Aktubinsk Electricity Distribution Company | Aktubinsk |
| 5. | KZ5 | Atyrau Electricity Distribution Company | Atyrau |
| 6. | KZ6 | Kostanai Electricity Distribution Company | Kostanai |
| 7. | KZ7 | N. Kazakhstan Electricity Distribution Company | N. Kazakhstan |
| 8. | KZ8 | Taldı-Korgan Electricity Distribution | Taldı-Korgan |
| 9. | KZ9 | Turkistanenergo Electricity Distribution | Taldı-Korgan |
| 10. | KZ10 | Small Hydroelectric Facilities | Nationwide |
| 11. | KZ11 | Atyrau Urban Development | Atyrau |
| 12. | KZ12 | Almaty-Astana Road | Almaty to Astana |
| 13. | KZ13 | Almaty-Bishkek Road Rehabilitation Project | Almaty to Bishkek |
| 14. | KZ14 | Railroad Equipment & Services | Nationwide |
| 15. | KZ15 | Track Maintenance Equipment & Services | Almaty to Astana |
| 16. | KZ16 | Atyrau Pilot Water Supply & Sewerage | Atyrau |
| 17. | KZ17 | Atyrau Airport Rehabilitation | Atyrau |
| 18. | KZ18 | Astana Airport Rehabilitation | Astana |
| 19. | KZ19 | Telecommunications Equipment | Almaty |


216



REPUBLIC OF KAZAKHSTAN

COALBED METHANE CAPTURE & USE

| Project Summary | |
|--------------------------|----------------------------------|
| Subsector | Coal/energy |
| Location | Karaganda |
| Project Cost | US \$5 Million |
| Export Potential | Open |
| Project Type | Services, Investment Opportunity |
| Project Executing Agency | Several, see below |



Project Outline

The Government of Kazakhstan and the joint stock company Ispat-Karmet (an Indian-Kazakhstan joint venture), are interested in developing feasibility studies and subsequent investment for coalbed methane capture and utilization in the Karaganda coal mining basin.

Technical Description

Methane has long been ventilated from the Karaganda coal mining basin in an effort to protect worker safety and reduce the incidence of explosion. Interest in reduction of greenhouse gas effects, in air quality, and in the potential energy potential of the methane has caused the Government to begin investigating the possibility of extraction of the coalbed methane and its utilization. Studies have verified that there is gas in commercial volumes available and that there is a substantial regional market for the gas as a fuel. Indeed, some experts believe that this is the best methane extraction project opportunity in the former Soviet Union.

Project Site

The project site would be the mines of the Karaganda coal mining basin in Northern Kazakhstan. The mines are owned by a joint stock company, Ispat-Karmet, and by the Government of Kazakhstan.

Project Status/Timeline

Pre-feasibility analysis has been completed. The current estimation of total costs is about \$5 million if methane capture is conducted at four mines and the methane is used regionally (source is Ministry of Ecology and Natural Resources. "Methane Extraction and Utilization in the Mines of the Karagenda Coal Basin for Use in Coal Fired or Combined Fuel Fired Boilers."). The US EPA coalbed methane outreach program has already conducted meetings with Ispat-Karmet to explore this issue, and considers the prospects very good for successful investment. The pre-feasibility analysis estimates 60 months from start to completion.

Equipment and Services

Construction and procurement of special equipment constitute almost half of the total budget proposed for the project. Such a project typically requires natural gas drilling equipment, compressor equipment, natural gas pipeline, turbines, internal combustion engines, and perhaps boiler modification equipment.

U.S. Competitiveness

The United States has extensive experience with effective coalbed methane capture and use. This project may also be desirable as an Activity Implemented Jointly under the Framework Convention on Climate Change. As a greenhouse gas which contributes to global warming, methane has a multiplier factor much higher than CO₂. Hence, investment in such a project could involve availability of significant Certified Emissions Reduction Units. Under the Global Warming Treaty, Kazakhstan will be allowed to sell these units on the international market.

Project Financing

This represents an investment opportunity for a firm that works in coalbed methane recapture and has experience in developing or transition economies. The potential to trade Certified Emissions Reduction Units improves the long run attractiveness of such an investment. Potentially, the World Bank's Global Environment Fund, EBRD, IFC, or OPIC would be available to help finance the project.

Conclusion

This energy project has several long-term benefits for the investors, firms that sell this type of equipment, and will help develop private sector activity in Kazakhstan's energy market. At this time, most of Kazakhstan's electricity is generated using coal as a fuel.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | EPA Coalbed Methane Outreach Program |
| Contact Person | Karl Schultz, Roger Fernandez |
| Title | Team Leader, Program Manager |
| Address | 501 3 rd St. NW Washington DC 20460 |
| Telephone | (202) 564-9468, 564-9481 |
| Fax | (202) 565-2077 |
| E-mail | Schultz.karl@epa.gov fernandez.roger@epa.gov |

| | |
|------------------------------|--|
| Organization or Company Name | National Environmental Center |
| Contact Person | Dr. T.I. Kakimzhanov; B. Esekin |
| Title | Technical Expert, NEC Director |
| Address | Kokshetau, Kazakhstan |
| Telephone | (31622) 55537 |
| Fax | (31622) 55537 |
| E-mail | Besekin@neapsd.kz |

| | |
|------------------------------|--|
| Organization or Company Name | Ispat-Karmet |
| Contact Person | MP Singh, Igor Shvec |
| Title | Director Business Plan Development, Head of Methane Division |
| Address | Karaganda |
| Telephone | (3212) 49-26-47; 49-37-03 |
| Fax | (3212) 41-20-74; 51-70-11 |
| E-mail | Mp.singh@ispatnet.com |

REPUBLIC OF KAZAKHSTAN

MODERNIZING THE ELECTRIC POWER WHOLESALE SYSTEM

Project Summary

| | |
|--------------------------|----------------------------|
| Subsector | Power |
| Location | Nationwide |
| Project Cost | US\$ 250 Million |
| Export Potential | US\$ 150 Million |
| Project Type | Investment /Procurement |
| Project Executing Agency | Several, see below |



Project Outline

The goal of the project is to modernize the electricity wholesale and retail distribution system in the Republic of Kazakhstan. This will also likely involve privatizing about 15 regional retail distribution networks and possibly one generation plant that remains under State ownership (see following individual project profiles for the opportunities to buy and/or help modernize seven regional distribution networks).

Technical Description

The wholesale distribution and much of the retail distribution of electricity is done by the Kazakhstan Electricity Grid Operating Company (KEGOC). KEGOC's network and most of its infrastructure were built in the 1970s and have not been maintained or updated. High-priority needs include replacing high-voltage equipment at about half of the 63 substations, and replacing the protective relaying systems at all the substations, a new dispatch control system, and institutional development and training to allow KEGOC's staff to operate the modernized system. KEGOC and the Government have already privatized three regional distribution networks: Almaty Power Consolidated (100% privately owned); Karaganda (70% privately owned); and one at Petropavlovsk, which was put through bankruptcy and sold at auction. KEGOC and the Government plan to privatize at least 15 more regional retail distribution systems and possibly one generation plant that are now under KEGOC's control. In the longer term, there has been some discussion of privatizing KEGOC itself.

Project Site

Nationwide, with a concentration in KEGOC's 63 substations, and the headquarters of the regional retail distribution systems.

Project Status/Timeline

KEGOC is in negotiations with the World Bank and the U.S. Agency for International Development (USAID) to: modernize the power sector; improve the reliability and quality of the electricity supply; improve the power dispatch control system; and improve the company's management by introducing a modern Management Information System (MIS). KEGOC is interested in immediately establishing direct contact with potential suppliers and investors to address some of its most pressing needs. The World Bank/USAID program is still under negotiation and the program likely will be finalized in early 2000.

Equipment and Services

Equipment needs include: circuit breakers; disconnecting switches; measurement transformers; protective relays; shunt reactors; transducers; remote terminal units; a new Supervisory Control and Data Acquisition (SCADA) system; new Regional Dispatch Centers (RDCs); a new National Dispatch Center (NDC); and all associated hardware and software that is required by these systems. KEGOC and the regional distribution networks also need to upgrade the telecommunication systems, install commercial meters, and integrate metering systems at all levels in the systems.

U.S. Competitiveness

KEGOC welcomes the involvement of U.S. firms as joint-venture partners, investors, and suppliers of goods and services. Eventual USAID procurements will be from U.S. firms, and World Bank procurements will use international competitive tenders. AES, a U.S. firm, has purchased more than a quarter of the installed electric generating capacity in the Republic of Kazakhstan.

Project Financing

KEGOC is capable of raising funds on the international capital markets on reasonable terms. For a company in a transition economy, it has been rated highly by international credit rating firms. The World Bank and USAID may provide up to half of the financing needed to carry out the modernization program.

Conclusion

This project offers very good procurement opportunities and some unique investment opportunities. All companies interested in a joint venture or investment relationship should complete rigorous due diligence studies prior to investing. While investing in the power sectors of nations of the former Soviet Union is not for the faint hearted, there are some good matches for companies looking for long term payoffs and diversification opportunities.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | World Bank Representative Office in Kazakhstan |
| Contact Person | Kadir Tanju Yurukoglu |
| Title | Resident Representative |
| Address | 41 Kazybek bi Street Bldg. A, 4 th floor 480100 Almaty, Kazakhstan |
| Telephone | (7-3272) 60-85-80 |
| Fax | (7-3272) 60-85-81 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | USAID |
| Contact Person | Barry Primm |
| Title | Chief Energy Officer |
| Address | Regional Mission for Central Asia C/O U.S. Embassy 97 A. Furmanov St. 480091 Almaty, Kazakhstan |
| Telephone | (7-3272) 50-79-08 |
| Fax | (7-3272) 69-64-90 |
| E-mail | Bprimm@usaid.gov |

Profile No. KZ-2

| | |
|------------------------------|--|
| Organization or Company Name | KEGOC |
| Contact Person | Kenzhemurat D. Dukenbayev |
| Title | First Vice-President |
| Address | 162 zh. Shevchenko St. Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 60 27 |
| Fax | (7 3272) 50 11 98 |
| E-mail | Dukenbayev@kegoc.kz |

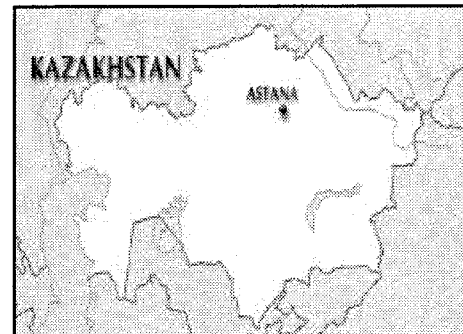
| | |
|------------------------------|---|
| Organization or Company Name | KEGOC |
| Contact Person | Evgeniy Khrapunov |
| Title | Vice-President |
| Address | 162 zh. Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 68 10 88 |
| Fax | (7 3272) 50 11 98 |
| E-mail | Hrapunov@kegoc.kz |

REPUBLIC OF KAZAKHSTAN

AKMOLINSK ELECTRICITY DISTRIBUTION

Project Summary

| | |
|--------------------------|--|
| Subsector | Electricity Sector |
| Location | Astana |
| Project Cost | US\$ 29 Million |
| Export Potential | US\$ 8 Million |
| Project Type | Privatization & Procurement |
| Project Executing Agency | KEGOC (Kazakhstan Electricity Grid Operating Agency) |



Project Outline

The Akmolinsk Electricity Distribution Company will be privatized this year. The company serves the Akmolinsk region. Since the capital of Kazakhstan shifted from Almaty to Astana, there has been a growing demand of electricity in this region due to the Government's accelerated development plans. Because many of the company's assets are obsolescent, once privatized, the new owners will buy new electrical equipment. This represents an export opportunity for U.S. companies supplying such equipment.

Technical Description

The Akmolinsk Electricity Distribution Company is managed by KEGOC. The owner of the property is the State Committee of Property Management. The Committee reports to the Ministry of Finance. The State Committee for Privatization will announce the tender to privatize this company this year.

The company owns 14 regional branches that distribute and retail 434.6 million kWh of electricity to consumers of the Akmolinsk area. The agriculture sector consumes 71.5 million kWh and the industrial sector is provided 150 million kWh. 30.7 million kWh is transmitted to state budget organizations and 115.4 million kWh to private consumers. The non-industry enterprises receive 52.7 million kWh. The Distribution Company uses 14.3 kWh for its own consumption. The losses due to imperfections in the transmission lines are 147.2 million kWh. The real losses (including commercial losses) are 258.8 million kWh.

The average price of electricity is 2 cents per kWh at the point of generation. Kazakhstan has privatized the electric generation market.

224

Project Site

The Akmolinsk Electricity Distribution Company is situated in the central part of Kazakhstan in the Akmola Oblast.

Project Status/Timeline

The Government of Kazakhstan plans to privatize Akmolinsk Electricity Distribution Company this year.

Equipment and Services

The company has substantial assets, even though most are from the 1970s and were built in the Soviet Union.

It owns the following transmission lines:

| | |
|--------------|-----------------------|
| 110 kV--- | 2,827 kilometers, |
| 35 kV--- | 5,687 kilometers, and |
| 10-0.4 kV--- | 23,780 kilometers. |

It also owns 6390 substations.

See the Project Profile titled "Modernizing the Electric Power Wholesale System" for detail on the likely equipment needs by the new owners once the enterprise is privatized. These needs represent export opportunities for U.S. suppliers.

U.S. Competitiveness

KEGOC invites U.S. companies who specialize in electricity retailing to participate in the privatization tender. U.S. companies are welcome and active in Kazakhstan. AES, a U.S. company owns over a quarter of the country's electric generation assets, with a capacity of 4,000 MW.

Project Financing

Privatizations are commercially financed. EBRD and IFC are available to provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market. The World Bank and EBRD offer political risk guarantees for this type of project. Purchasers will be expected to prepare investment plans and business plans.

Conclusion

Documentation on the company is available from KEGOC. Potential investors are urged to complete due diligence studies prior to submitting a binding bid.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | KEGOC |
| Contact Person | Evgenyi D. Feld |
| Title | First Vice-President |
| Address | 162 ZH Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 62 00 |
| Fax | (7 3272) 50 11 98 |
| E-mail | feld@kegoc.kz |

| | |
|------------------------------|--|
| Organization or Company Name | Akmolinsk Distribution Company |
| Contact Person | Igor U. Kulin |
| Title | President |
| Address | 37 Mira St., Astana, 473022, Republic of Kazakhstan |
| Telephone | (7 3172) 37 77 10 |
| Fax | |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

AKTUBINSK ELECTRICITY DISTRIBUTION COMPANY

Project Summary

| | |
|--------------------------|--|
| Subsector | Electricity Sector |
| Location | Aktubinsk |
| Project Cost | US\$ 23 Million |
| Export Potential | US\$ 11 Million |
| Project Type | Privatization & Procurement |
| Project Executing Agency | KEGOC (Kazakhstan Electricity Grid Operating Agency) |



Project Outline

The Aktubinsk Electricity Distribution Company will be privatized this year. The company serves the Aktubinsk region, which has large deposits of oil and natural gas. Electricity is used widely for extracting these deposits. Because many of the company's assets are obsolescent, once privatized, the new owners will buy new electrical equipment. This represents an export opportunity for U.S. companies supplying such equipment.

Technical Description

The Aktubinsk Electricity Distribution Company is managed by KEGOC. The owner of the property is the State Committee of Property Management. The Committee reports to the Ministry of Finance. The State Committee for Privatization will announce the tender to privatize this company this year.

The company consists of 13 regional branches that distribute and retail 1100.8 million kWh of electricity to consumers of the Aktubinsk area. The agriculture sector consumes 32.8 million kWh and the industrial sector is provided 806 million kWh. 38.7 million kWh is transmitted to state budget organizations and 190.3 million kWh to private consumers. The non-industry enterprises receive 25.7 million kWh. The Distribution Company uses 7.3 kWh for its own consumption. The losses due to imperfections in the transmission lines are 212.5 million kWh. The real losses (including commercial losses) are 390.3 million kWh.

The average price of electricity is 2 cents per kWh at the point of generation. Kazakhstan has privatized the electric generation market.

227

Project Site

The Aktubinsk Electricity Distribution Company is situated in the north-central part of Kazakhstan.

Project Status/Timeline

The Government of Kazakhstan plans to privatize Aktubinsk Electricity Distribution Company this year.

Equipment and Services

The company has substantial assets, even though most are from the 1970s and were built in the Soviet Union.

It owns the following transmission lines:

| | |
|--------------|----------------------|
| 110 kV--- | 2,818 kilometers, |
| 35 kV--- | 4,174kilometers, and |
| 10-0.4 kV--- | 16,362 kilometers. |

It also owns 3456 substations.

See the Project Profile titled "Modernizing the Electric Power Wholesale System" for detail on the likely equipment needs by the new owners once the enterprise is privatized. These needs represent export opportunities for U.S. suppliers.

U.S. Competitiveness

KEGOC invites U.S. companies who specialize in electricity retailing to participate in the privatization tender. U.S. companies are welcome and active in Kazakhstan. AES, a U.S. company owns over a quarter of the country's electric generation assets, with a capacity of 4,000 MW.

Project Financing

Privatizations are commercially financed. EBRD and IFC are available to provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market. The World Bank and EBRD offer political risk guarantees for this type of project. Purchasers will be expected to prepare investment plans and business plans.

Conclusion

Documentation on the company is available from KEGOC. Potential investors are urged to complete due diligence studies prior to submitting a binding bid.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | KEGOC |
| Contact Person | Evgenyi D. Feld |
| Title | First Vice-President |
| Address | 162 ZH Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 62 00 |
| Fax | (7 3272) 50 11 98 |
| E-mail | feld@kegoc.kz |

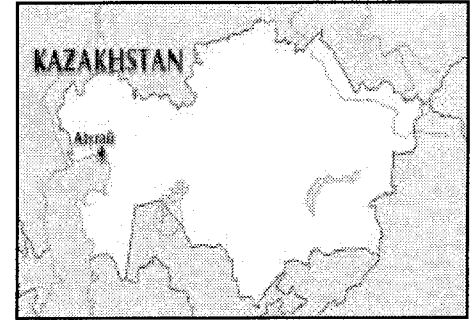
| | |
|------------------------------|---|
| Organization or Company Name | Aktubinsk Distribution Company |
| Contact Person | Malik A. Serikbaev |
| Title | President |
| Address | 42 Strelkovaia Divisia St., Aktobe, 463016, Republic of Kazakhstan |
| Telephone | (7 3132) 53 08 93 |
| Fax | |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

ATYRAU ELECTRICITY DISTRIBUTION COMPANY

Project Summary

| | |
|--------------------------|--|
| Subsector | Electricity Sector |
| Location | Atyrau |
| Project Cost | US\$ 14 Million |
| Export Potential | US\$ 5 Million |
| Project Type | Privatization & Procurement |
| Project Executing Agency | KEGOC (Kazakhstan Electricity Grid Operating Agency) |



Project Outline

The Atyrau Electricity Distribution Company will be privatized this year. The company serves the Atyrau region, which is the main oil region in Kazakhstan. This region is becoming increasingly important as many oil and gas companies forecast the likelihood of rich oil strikes in the North Caspian Sea. The city of Atyrau is to undergo many municipal improvement projects as more companies relocate to the region. Because many of the company's assets are obsolescent, once privatized, the new owners will buy new electrical equipment. This represents an export opportunity for U.S. companies supplying such equipment.

Technical Description

The Atyrau Electricity Distribution Company is managed by KEGOC. The owner of the property is the State Committee of Property Management. The Committee reports to the Ministry of Finance.

The company distributes and retails 673.1 million KWh of electricity to consumers in the Atyrau area. The agriculture sector consumes 13.1 million kWh and the industrial sector is provided 443.4 million kWh. Twenty four million kWh is transmitted to state organizations and 163.9 million kWh to private consumers. Nonindustrial enterprises receive 27.9 million kWh. The Distribution Company uses 0.8 million kWh for its own consumption. Losses due to technical problems in transmission are 120.6 million kWh. Total losses (including commercial losses) are 297.5 million kWh.

The average price of electricity is 4.5 cents per kWh at the point of generation. Kazakhstan has privatized the electric generation market.

230

Project Site

The Atyrau Electricity Distribution Company is situated in the western part of Kazakhstan.

Project Status/Timeline

The Government of Kazakhstan, through the State Committee on Privatization, plans to privatize Atyrau Electricity Distribution Company this year.

Equipment and Services

The company has substantial assets, even though most are from the 1970s and were built in the Soviet Union.

It owns the following transmission lines:

| | |
|--------------|---------------------|
| 110 kV--- | 2,063 kilometers, |
| 35 kV--- | 873 kilometers, and |
| 10-0.4 kV--- | 6,599 kilometers. |

It also owns 1,968 substations.

See the Project Profile titled "Modernizing the Electric Power Wholesale System" for detail on the likely equipment needs by the new owners once the enterprise is privatized. These needs represent export opportunities for U.S. suppliers.

U.S. Competitiveness

KEGOC invites U.S. companies who specialize in electricity retailing to participate in the privatization tender. U.S. companies are welcome and active in Kazakhstan. AES, a U.S. company, owns over a quarter of the country's electric generation assets, with a capacity of 4,000 MW.

Project Financing

Privatizations are commercially financed. EBRD and IFC can provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market. The World Bank and EBRD offer political risk guarantees for this type of project. Purchasers will be expected to prepare investment plans and business plans.

Conclusion

Documentation on the company is available from KEGOC. Potential investors are urged to complete due diligence studies prior to submitting a binding bid. Equipment suppliers will want to follow the privatization process to learn about the new owners and their willingness to modernize the physical plant.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | KEGOC |
| Contact Person | Evgenyi D. Feld |
| Title | First Vice-President |
| Address | 162"zh" Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 62 00 |
| Fax | (7 3272) 50 11 98 |
| E-mail | Feld@kegoc.kz |

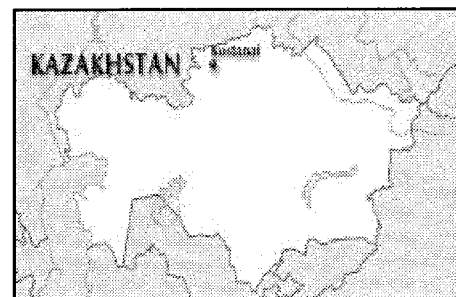
| | |
|------------------------------|--|
| Organization or Company Name | Atyrau Distribution Company |
| Contact Person | Alexander A. Goruhanov |
| Title | President |
| Address | 110 A Muhanbeta St., Atyrau, 455002, Republic of Kazakhstan |
| Telephone | (7 3122) 25 42 64 |
| Fax | |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

KOSTANAI ELECTRICITY DISTRIBUTION COMPANY

Project Summary

| | |
|--------------------------|--|
| Subsector | Electricity Sector |
| Location | Kostanai |
| Project Cost | US\$ 41 Million |
| Export Potential | US\$ 15 Million |
| Project Type | Privatization & Procurement |
| Project Executing Agency | KEGOC (Kazakhstan Electricity Grid Operating Agency) |



Project Outline

The Kostanai Electricity Distribution Company will be privatized this year. The company serves the Kostanai region. Many enterprises in this region extract and process resources for metallurgical plants in Kazakhstan. Because many of the company's assets are obsolescent, once privatized, the new owners will buy new electrical equipment. This represents an export opportunity for U.S. companies supplying such equipment.

Technical Description

The Kostanai Electricity Distribution Company is managed by KEGOC. The owner of the property is the State Committee of Property Management. The Committee reports to the Ministry of Finance. The State Committee for Privatization will announce the tender to privatize this company this year.

The company distributes and retails 566.4 million kWh of electricity to consumers of the Kostanai area. The agriculture sector consumes 128.8 million kWh and the industrial sector is provided 186.5 million kWh. About 47 million kWh is transmitted to state budget organizations and 154.5 million kWh to private consumers. The non-industry enterprises receive 49.3 million kWh. The Distribution Company uses 0.3 kWh for its own consumption. The losses due to imperfections in the transmission lines are 181.8 million kWh. The real losses (including commercial losses) are 442.9 million kWh.

The average price of electricity is 2 cents per kWh at the point of generation. Kazakhstan has privatized the electric generation market.

Project Site

The Kostanai Electricity Distribution Company is situated in the central part of Kazakhstan.

Project Status/Timeline

The Government of Kazakhstan plans to privatize Kostanai Electricity Distribution Company this year.

Equipment and Services

The company has substantial assets, even though most are from the 1970s and were built in the Soviet Union.

It owns the following transmission lines:

| | |
|--------------|-----------------------|
| 110 kV--- | 2,777 kilometers, |
| 35 kV--- | 5,479 kilometers, and |
| 10-0.4 kV--- | 22,423 kilometers. |

It also owns 7123 substations.

See the Project Profile titled "Modernizing the Electric Power Wholesale System" for detail on the likely equipment needs by the new owners once the enterprise is privatized. These needs represent export opportunities for U.S. suppliers.

U.S. Competitiveness

KEGOC invites U.S. companies who specialize in electricity retailing to participate in the privatization tender. U.S. companies are welcome and active in Kazakhstan. AES, a U.S. company owns over a quarter of the country's electric generation assets, with a capacity of 4,000 MW.

Project Financing

Privatizations are commercially financed. EBRD and IFC are available to provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market. The World Bank and EBRD offer political risk guarantees for this type of project. Purchasers will be expected to prepare investment plans and business plans.

Conclusion

Documentation on the company is available from KEGOC. Potential investors are urged to complete due diligence studies prior to submitting a binding bid.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | KEGOC |
| Contact Person | Evgenyi D. Feld |
| Title | First Vice-President |
| Address | 162 ZH Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 62 00 |
| Fax | (7 3272) 50 11 98 |
| E-mail | feld@kegoc.kz |

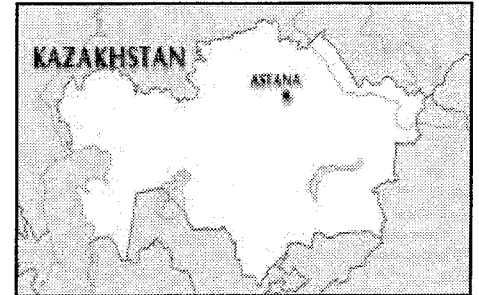
| | |
|------------------------------|--|
| Organization or Company Name | Kostanai Distribution Company |
| Contact Person | Serik N. Baitenov |
| Title | President |
| Address | 115 Lenin St., Kostanai, 458141, Republic of Kazakhstan |
| Telephone | (7 3142) 54 30 21 |
| Fax | |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

NORTH KAZAKHSTAN ELECTRICITY DISTRIBUTION COMPANY

Project Summary

| | |
|--------------------------|--|
| Subsector | Electricity Sector |
| Location | Northern Kazakhstan |
| Project Cost | US\$ 12 Million |
| Export Potential | US\$ 5 Million |
| Project Type | Privatization & Procurement |
| Project Executing Agency | KEGOC (Kazakhstan Electricity Grid Operating Agency) |



Project Outline

The North Kazakhstan Electricity Distribution Company will be privatized this year. The company serves the North Kazakhstan region, which is the industrial and agricultural center of the country. Because many of the company's assets are obsolescent, once privatized, the new owners will buy new electrical equipment. This represents an export opportunity for U.S. companies supplying such equipment.

Technical Description

The North Kazakhstan Electricity Distribution Company is managed by KEGOC. The owner of the property is the State Committee of Property Management. The Committee reports to the Ministry of Finance. The State Committee for Privatization will announce the tender to privatize this company this year.

The company owns 14 regional branches that distribute and retail 480.4 million kWh of electricity to consumers of the North Kazakhstan area. The agriculture sector consumes 71.1 million kWh and the industrial sector is provided 206.1 million kWh. 34.4 million kWh is transmitted to state budget organizations and 118.6 million kWh to private consumers. The non-industry enterprises receive 37.1 million kWh. The Distribution Company uses 13.1 kWh for its own consumption. The losses due to imperfections in the transmission lines are 134.7 million kWh. The real losses (including commercial losses) are 334.9 million kWh.

The average price of electricity is 2 cents per kWh at the point of generation. Kazakhstan has privatized the electric generation market.

236

Project Site

The Electricity Distribution Company is situated in the northern part of Kazakhstan.

Project Status/Timeline

The Government of Kazakhstan plans to privatize North Kazakhstan Electricity Distribution Company this year.

Equipment and Services

The company has substantial assets, even though most are from the 1970s and were built in the Soviet Union.

It owns the following transmission lines:

| | |
|--------------|-----------------------|
| 110 kV--- | 1,341 kilometers, |
| 35 kV--- | 2,858 kilometers, and |
| 10-0.4 kV--- | 21,415 kilometers. |

It also owns 3634 substations.

See the Project Profile titled "Modernizing the Electric Power Wholesale System" for detail on the likely equipment needs by the new owners once the enterprise is privatized. These needs represent export opportunities for U.S. suppliers.

U.S. Competitiveness

KEGOC invites U.S. companies who specialize in electricity retailing to participate in the privatization tender. U.S. companies are welcome and active in Kazakhstan. AES, a U.S. company owns over a quarter of the country's electric generation assets, with a capacity of 4,000 MW.

Project Financing

Privatizations are commercially financed. EBRD and IFC are available to provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market. The World Bank and EBRD offer political risk guarantees for this type of project. Purchasers will be expected to prepare investment plans and business plans.

Conclusion

Documentation on the company is available from KEGOC. Potential investors are urged to complete due diligence studies prior to submitting a binding bid.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | KEGOC |
| Contact Person | Evgenyi D. Feld |
| Title | First Vice-President |
| Address | 162 ZH Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 62 00 |
| Fax | (7 3272) 50 11 98 |
| E-mail | feld@kegoc.kz |

| | |
|------------------------------|--|
| Organization or Company Name | North Kazakhstan Distribution Company |
| Contact Person | Sergei A. Reznik |
| Title | President |
| Address | 27 A Djambul St., Petropavlovsk, 642014, Republic of Kazakhstan |
| Telephone | (7 3152) 54 30 21 |
| Fax | |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

TALDI-KORGAN ELECTRICITY DISTRIBUTION

Project Summary

| | |
|--------------------------|--|
| Subsector | Electricity Sector |
| Location | Taldi-Korgan |
| Project Cost | US\$ 6 Million |
| Export Potential | US\$ 2 Million |
| Project Type | Privatization & Procurement |
| Project Executing Agency | KEGOC (Kazakhstan Electricity Grid Operating Agency) |



Project Outline

The Taldi-Korgan Electricity Distribution Company will be privatized this year. The company serves the Taldi-Korgan region, which borders China. Because many of the company's assets are obsolescent, once privatized, the new owners will buy new electrical equipment. This represents an export opportunity for U.S. companies supplying such equipment.

Technical Description

The Taldi-Korgan Electricity Distribution Company is managed by KEGOC. The owner of the property is the State Committee of Property Management. The Committee reports to the Ministry of Finance. The State Committee for Privatization will announce the tender to privatize this company this year.

This company provides the consumers of the Taldi-Korgan area and specializes mainly in the distribution of electricity. It provides 170.6 million kWh to the local small distribution companies. The losses due to imperfections in the transmission lines are 16.1 million kWh. The real losses (including commercial losses) are 22.6 million kWh.

The average price of electricity is 2 cents per kWh at the point of generation. Kazakhstan has privatized the electric generation market.

Project Site

The Distribution Company is situated in the central part of Kazakhstan in the Taldikorgan Oblast.

Project Status/Timeline

The Government of Kazakhstan plans to privatize Taldikorgan Electricity Distribution Company this year.

Equipment and Services

The company has substantial assets, even though most are from the 1970s and were built in the Soviet Union.

It owns the following transmission lines:

| | |
|-----------|-----------------------|
| 110 kV--- | 1,553 kilometers, |
| 35 kV--- | 1,664 kilometers, and |

It also owns 108 substations.

See the Project Profile titled "Modernizing the Electric Power Wholesale System" for detail on the likely equipment needs by the new owners once the enterprise is privatized. These needs represent export opportunities for U.S. suppliers.

U.S. Competitiveness

KEGOC invites U.S. companies who specialize in electricity retailing to participate in the privatization tender. U.S. companies are welcome and active in Kazakhstan. AES, a U.S. company owns over a quarter of the country's electric generation assets, with a capacity of 4,000 MW.

Project Financing

Privatizations are commercially financed. EBRD and IFC are available to provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market. The World Bank and EBRD offer political risk guarantees for this type of project. Purchasers will be expected to prepare investment plans and business plans.

Conclusion

Documentation on the company is available from KEGOC. Potential investors are urged to complete due diligence studies prior to submitting a binding bid.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | KEGOC |
| Contact Person | Evgenyi D. Feld |
| Title | First Vice-President |
| Address | 162 ZH Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 62 00 |
| Fax | (7 3272) 50 11 98 |
| E-mail | feld@kegoc.kz |

| | |
|------------------------------|--|
| Organization or Company Name | Taldi-Korgan joint-stock transportation distribution company |
| Contact Person | Rinat R Abdugaliyev |
| Title | President |
| Address | 274 Ablaihana St., Taldi-Korgan, 488000, Republic of Kazakhstan |
| Telephone | (7 3282) 27 04 20 |
| Fax | |
| E-mail | |

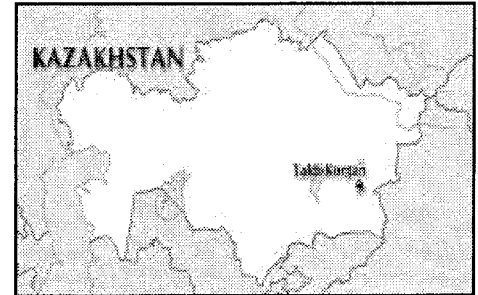
241

REPUBLIC OF KAZAKHSTAN

TURKISTANENERGO ELECTRICITY DISTRIBUTION

Project Summary

| | |
|--------------------------|--|
| Subsector | Electricity Sector |
| Location | Taldi-Korgan Oblast |
| Project Cost | US\$ 24 Million |
| Export Potential | US\$ 8 Million |
| Project Type | Privatization & Procurement |
| Project Executing Agency | KEGOC (Kazakhstan Electricity Grid Operating Agency) |



Project Outline

Turkistanenergo Electricity Distribution Company will be privatized this year. The Turkistan region that the company serves is an agricultural, historical, and industrial center of Kazakhstan. Because many of the company's assets are obsolescent, once privatized, the new owners will buy new electrical equipment. This represents an export opportunity for U.S. companies supplying such equipment.

Technical Description

The Turkistanenergo Electricity Distribution Company is managed by KEGOC. The owner of the property is the State Committee of Property Management. The Committee reports to the Ministry of Finance. The State Committee for Privatization will announce the tender to privatize this company this year.

This company distributes and retails electricity to the consumers of the Turkistan area. The average price of electricity is 2 cents per kWh at the point of generation. Kazakhstan has privatized the electric generation market.

Project Site

The Turkistan region is in the Taldi-Korgan Oblast, situated in southern part of Kazakhstan. This Oblast borders China.

Project Status/Timeline

The Government of Kazakhstan plans to privatize Turkistanenergo Electricity Distribution Company this year.

Equipment and Services

The company has substantial assets, even though most are from the 1970s and were built in the Soviet Union.

It owns the following transmission lines:

| | |
|--------------|-----------------------|
| 110 kV--- | 1,562 kilometers, |
| 35 kV--- | 3,112 kilometers, and |
| 10-0.4 kV--- | 20,695 kilometers. |

It also owns 258 substations.

See the Project Profile titled "Modernizing the Electric Power Wholesale System" for detail on the likely equipment needs by the new owners once the enterprise is privatized. These needs represent export opportunities for U.S. suppliers.

U.S. Competitiveness

KEGOC invites U.S. companies who specialize in electricity retailing to participate in the privatization tender. U.S. companies are welcome and active in Kazakhstan. AES, a U.S. company owns over a quarter of the country's electric generation assets, with a capacity of 4,000 MW.

Project Financing

Privatizations are commercially financed. EBRD and IFC are available to provide financing to commercially viable projects at terms that are usually superior to what is available in the country's commercial credit market. The World Bank and EBRD offer political risk guarantees for this type of project. Purchasers will be expected to prepare investment plans and business plans.

Conclusion

Documentation on the company is available from KEGOC. Potential investors are urged to complete due diligence studies prior to submitting a binding bid.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | KEGOC |
| Contact Person | Evgenyi D. Feld |
| Title | First Vice-President |
| Address | 162 zh. Shevchenko St., Almaty, 480008, Republic of Kazakhstan |
| Telephone | (7 3272) 62 62 00 |
| Fax | (7 3272) 50 11 98 |
| E-mail | feld@kegoc.kz |

| | |
|------------------------------|--|
| Organization or Company Name | Turkistanenergo Electricity Distribution Company |
| Contact Person | Muhtar K. Kembraev |
| Title | President |
| Address | 1 Energetik St., Chimkent, 486023, Republic of Kazakhstan |
| Telephone | (7 3252) 56 03 24 |
| Fax | |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

SMALL HYDROELECTRIC FACILITIES

Project Summary

| | |
|--------------------------|--|
| Subsector | Energy |
| Location | Nationwide |
| Project Cost | US\$ 400 Million |
| Export Potential | Open |
| Project Type | Investment/Procurement |
| Project Executing Agency | Ministry of Natural Resources and Environmental Protection |



Project Outline

To develop a network of small hydropower facilities throughout Kazakhstan where the costs of distributing power from distant large generation plants is high and where the hydro facilities have the ability to reduce greenhouse gas emissions.

Technical Description

The World Bank has held discussions with a number of local companies and the Government of Kazakhstan on the possibility of establishing an initial project with a budget of \$10 million to: establish institutional frameworks for developing micro hydro power plants (MHPP); identify consumer demand for MHPP installations; construct pilot MHPPs in various regions of Kazakhstan; and prepare feasibility studies for hydro power stations.

Business opportunities exist in this area. The World Bank's Global Environmental Facility (GEF) makes grants to help construct facilities that reduce greenhouse gas emissions (i.e., by reducing the need for coal-fired electricity production) that would not otherwise be commercially viable. Typically, the GEF prefers to work with a public-private partnership to develop its projects, including MHPP. The table below shows several possible new MHPPs that could be built in Kazakhstan.

| Name | River | MW/yr. (000) | Investment (000,000) |
|--------------|-------------|-----------------|-------------------------|
| Oussek-1 | Oussek | 18 | \$14.4 |
| Oussek-2 | Oussek | 18 | \$10.4 |
| Chinbullak-1 | Oussek | 31 | \$19.2 |
| Malloussek | Maly-Oussek | 78 | \$77.6 |

245

| | | | |
|--------------|--------|------|--------|
| Chinbullak-2 | Oussek | 80 | \$52.8 |
| Panfilov 1 | Oussek | 6.4 | \$15.2 |
| Panfilov 2 | Oussek | 6.4 | \$12.1 |
| Panfilov 3 | Oussek | 32.9 | \$12.6 |

The Government has proposed 23 such facilities.

Project Site

To be located on the Oussek, Maly-Oussek, Canal Babelian, Kaskelen, Chilik, Issyk, Merke, and other rivers throughout the country.

Project Status/Timeline

The World Bank project is in the design stage at this time. Opportunities for joint-venture investors to construct MHPP facilities likely will materialize in late 2000. The Republic of Kazakhstan is in the process of reorganizing and privatizing its power sector. More reforms on the legal and institutional fronts are required before opportunities to build MHPPs will be realized.

Equipment and Services

These represent investment opportunities as well as opportunities to provide design and engineering services, and supply equipment such as turbines, transformers, power equipment and construction equipment.

U.S. Competitiveness

U.S. firms are among the world's best at producing equipment for MHPPs. The Republic of Kazakhstan has and is expected to continue to welcome U.S. direct investment of this nature.

246

Project Financing

Project financing will be up to the investor. However, the World Bank GEF will be available for grant funds should potential investors and the Government demonstrate the effectiveness of a project reducing greenhouse gasses. OPIC, the EBRD and IFC would be the best sources of funding and guarantees against political risk.

Conclusion

While these opportunities are not immediate, they are real, and reflect the World Bank's and the Government of Kazakhstan's commitment to reduce greenhouse gas emissions and promote private business activity in the power sector.

Key Decision Makers


| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Natural Resources and Environmental Protection |
| Contact Person | Murat Musataev |
| Title | Vice Minister |
| Address | 81 Karl Marx St., Kokshetau 475000, Republic of Kazakhstan |
| Telephone | (7-31622) 542-69 |
| Fax | (7-31622) 506-20 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | World Bank- Environmental and Social Sustainable Development; Europe and Central Asia Region |
| Contact Person | Victor Loksha |
| Title | Environmental Economist |
| Address | 1818 H St. NW, Washington, D.C. 20433 |
| Telephone | (202) 473-5807 |
| Fax | |
| E-mail | Vloksha@worldbank.org |

REPUBLIC OF KAZAKHSTAN

ATYRAU URBAN DEVELOPMENT

| Project Summary | |
|--------------------------|-----------------------|
| Subsector | Multisectoral |
| Location | Atyrau |
| Project Cost | US\$ 10 Million |
| Export Potential | US\$ 4 Million |
| Project Type | Design & Construction |
| Project Executing Agency | Several, see below |



Project Outline

To provide integrated urban development to Atyrau city so that it can support the development of the oil deposits in the North Caspian Sea and the Tengiz oilfield.

Technical Description

There is strong evidence that the oil reserves in the North Caspian Sea are quite large. Test drilling will begin this spring to determine the richness of the deposits. Atyrau is the city that is to be used as the closest urban center to support the drilling activities in the North Caspian Sea. Two other project profiles also address the development of this city: Atyrau Airport Rehabilitation and the Atyrau Water and Sewer Rehabilitation. A host of private companies, donor organizations and Government units are planning to develop Atyrau into an efficient urban center to support the activities in the North Caspian. This requires major infrastructure investments, as well as the construction of high-end office space and housing. As the oil companies increasingly place their staff in the city, the need for hospitals, restaurants, and other service outlets will grow rapidly.

The OKIOC Consortium, formed to explore and operate the offshore properties, has nine members: Shell/BP, British Gas, Total, Agip, Phillips Petroleum, Impex, Statoil, and Mobil. They will likely divide an annual investment sum of \$5 million between the Atyrau and Mangistau Oblasts (the two Oblasts in Kazakhstan that share the Caspian coastline). In Atyrau, the two primary investments have been constructing a sports complex and 100 apartments for their employees. As the North Caspian resources are developed, their need for expatriate housing is certain to increase.

While not based on the resources of the North Caspian, Tengizchevroil has already invested over \$150 million to help establish a Business Advisory Center, support for the EBRD Small Business Loan Fund, a bakery, a sports facility a hospital, an auxiliary heating system and a school in Atyrau. They are also spending \$2.3 billion to develop

three processing lines to better tap into the Tengiz field that is south and east of Atyrau. They expect to need housing for 3,000 expatriate staff over the next 5 years. The company is also constructing a new office complex.

At the oil companies' requests, USAID is expanding its activities in the Oblast. USAID will be providing technical assistance in improving local governance, in improving public health by building on an existing anti-TB program, and establishing a sister city program for Atyrau.

The Central Asian-American Enterprise Fund is also planning to be active in the development of Atyrau. See the financing section below. The UNDP is acting as a coordinator of development activities in the city.

Project Site

Atyrau Oblast has a population of about 500,000. Atyrau city is subject to serious floods, and is also in need of a flood control program.

Project Status/Timeline

The speed with which the city of Atyrau develops will reflect development in the international oil market and the exploration activity in the North Caspian. The extent of the oil deposits should be much more certain by the beginning of next year (2000).

Equipment and Services

Equipment and services needed cover an extremely wide field, ranging from consulting services in planning, engineering, and social services, to hospital supplies, sports equipment, to construction equipment.

U.S. Competitiveness

U.S. firms are already extremely active in developing the city. USAID contracts go to U.S. firms. World Bank tenders are internationally competitive, as are procurement processes from the international oil companies involved.

Project Financing

Project financing will come from a number of sources. The Central Asian-American Enterprise Fund was established with a capital base of \$150 million. It makes direct investments of up to \$5 million in firm rehabilitation, Greenfield projects and business expansions. It also lends through local banks to \$500,000 per project. Finally, they have a micro-loan program. The EBRD is active, most obviously through their Small Business Program. USAID is working primarily with existing contractors, but new activities may be forthcoming depending on how the region develops. The IFC is always interested in loans to finance private sector initiatives in transition economies.

Conclusion

Potential investors and suppliers of all types of equipment and services should watch carefully how the exploration of the North Caspian oil reserves proceeds this year. If the deposits are as big as the geologists expect, this city and the Oblasts on the coast of the Caspian in Kazakhstan will have substantial business opportunities.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Tengizchevroil |
| Contact Person | Mike Kangas |
| Title | Government Relations Manager |
| Address | Hyatt Regency Rahat Palace Office tower, 5 th floor Akademik Satpacv Ave 29/5 Almaty 480070, Kazakhstan |
| Telephone | (7-3272) 60-86-62 |
| Fax | (7-3272) 60-86-28 |
| E-mail | Kang@tengizchevroil.com |

| | |
|------------------------------|--|
| Organization or Company Name | EBRD-Kazakhstan Small Business Fund |
| Contact Person | Bertolt Hertzfeldt |
| Title | Bank Advisor |
| Address | 237 Turgut Ozala Street Almaty 480046, Kazakhstan |
| Telephone | (7-3272) 46-48-00 |
| Fax | (7-3272) 46-68-79 |
| E-mail | |

| | |
|------------------------------|---|
| Organization or Company Name | Central Asian-American Enterprise Fund |
| Contact Person | David Lloyd |
| Title | Vice President |
| Address | 531 Seyfullin Ave, 2 nd Floor Almaty 480091, Kazakhstan |
| Telephone | (7-3272) 63-88-15 |
| Fax | (7-3272) 69-45-89 |
| E-mail | |

| | |
|------------------------------|------------------------------------|
| Organization or Company Name | Office of the Akimat (Governor) |
| Contact Person | Sergey S. Alpatanov |
| Title | Chief, Regional Economy Department |
| Address | Atyrau, Atyrau Oblast, Kazakhstan |
| Telephone | (7-3122) 25-40-61 |
| Fax | (7-3122) 25-40-61 |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

ALMATY-ASTANA ROAD

Project Summary

| | |
|--------------------------|---------------------|
| Subsector | Transportation |
| Location | Almaty to Astana |
| Project Cost | US\$ 697 Million |
| Export Potential | US\$ 108 Million |
| Project Type | Construction |
| Project Executing Agency | Department of Roads |



Project Outline

The Almaty to Astana Road Project consists of the rehabilitation of National Highway connecting the largest and old capital city of Almaty with the new capital city of Astana. The total length of the road is approximately 1220 kilometers. This entire highway is being upgraded with financing from the World Bank and Asian Development Bank. At this time, however, only two links have financing in place, one partly financed by the World Bank, and one partially financed by the ADB.

Technical Description

The World Bank is providing assistance on the northern section of the road and the ADB on the southern section. The road is divided into the following sections for implementation. Except for the two Projects currently being proposed for implementation by the World Bank and ADB, the lengths of the sections have been estimated from a map.

- The Astana to Karaganda Road Section is approximately 220 kilometers in length and is being implemented under a loan from the World Bank. The estimated cost of the rehabilitation of this section of road is \$148.5 million.
- The Karaganda to Aksytau Road Section is 215 kilometers in length and is currently being advertised for rehabilitation under a World Bank Loan Program with an estimated cost of \$145.0 million.
- The Gulshad to Aksytau Road Section is 192 kilometers in length and is currently begin advertised for rehabilitated under an ADB Loan Program. The ADB cost estimate for the rehabilitation of this section of road is approximately \$77.0 million.

252

- The Gulshad to Almaty Road Section is approximately 593 kilometers in length and is being rehabilitated under an ADB Loan Program. The estimated cost of the rehabilitation of this section of road is approximately \$ 326.1 million.

Karaganda-Aksytau Project (World Bank)

This World Bank-funded project is currently being advertised for construction. The Karaganda to Aksytau Road project consists of the rehabilitation and/or reconstruction and supervision of construction for 215 kilometers of the Almaty to Astana Highway between the second largest city of Karaganda south to Aksytau. The work will consist of rehabilitating and upgrading the highway to international roadway standards, including bridges, drainage systems, traffic markings, traffic signs and lighting in towns as required. The Project also provides for the Engineering Services for the design and supervision of the construction works, including advisory assistance to the Department of Highways and Ministry of Transport. There has been very little maintenance on the road during the last ten years and no significant maintenance and/or repairs for 25 to 30 years. The pavement surface is badly rutted and damaged. The bridges and drainage systems all need rehabilitation or re-construction. The road has very little traffic markings and the traffic signing is totally inadequate and requires improvement.

The existing alignment is generally satisfactory for the rolling terrain given the current traffic volume of approximately 2500 vehicles per day. However, there are some sections needing improvement of the vertical and horizontal alignment. While the road is not currently heavily traveled, the road is the primary north-south highway for the country and does carry significant long haul truck motor freight from as far away as Russia and Western Europe.

Gulshad-Aksytau Project (ADB)

This ADB-funded Project is currently being advertised for construction. The Gulshad to Aksytau Road Project consists of the rehabilitation and/or reconstruction and supervision of construction for 192 kilometers of the Almaty to Astana Highway between the towns of Gulshad, Saryshagan and Aksytau. The work will consist of rehabilitating and upgrading the highway to international roadway standards, including bridges, drainage systems, traffic markings, traffic signs and lighting in towns as required.

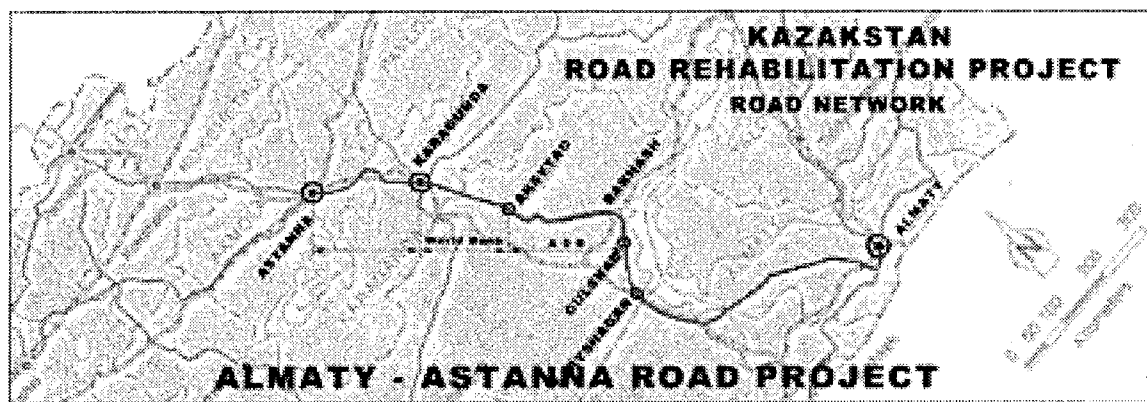
The Project provides for Consulting Services for the detailed design, supervision, monitoring and evaluation of the construction work.

The existing alignment is generally satisfactory for the rolling terrain given the current traffic volume of approximately 2500 vehicles per day. However, there are some sections needing improvement of the vertical and horizontal alignment. While the road is not currently heavily traveled, the road is the primary north-south highway for the country and does carry significant long haul truck motor freight from as far away as Russia and Western Europe.

Project Site

The World Bank Project Site is located on the Almaty-Astana Highway, a length of approximately 1220 kilometers. The Project begins at the city of Karaganda approximately 220 kilometers south of the capital city of Astana. The Project ends at the city of Aksytau a distance of approximately 215 kilometers.

The ADB Project Site is also located on the Almaty-Astana Highway. The Project begins at the city of Aksytau, passes through the city of Balkhash and, ends at the town of Gulshad. See attached map.



Project Status/Timeline

The Kazakhstan Department of Roads has advertised both projects for Construction. The Department of Roads will be prequalifying Engineering Consultants and Construction Contractors for the projects in the 1st half of 1999.

The construction supervision engineering and construction contracts are expected to be awarded in the 2nd half of 1999. The construction works will run from 2000 to 2002.

The World Bank and ADB both have one section each of the Almaty to Astana Highway presently under construction, which are expected to be completed in 2001.

Equipment and Services

The equipment and services for the World Bank and ADB current projects will consist of the following:

Karaganda-Aksytau Section (World Bank)

- | | |
|---|------------------|
| a) Consulting Services for Detailed Design and Construction Supervision | \$ 8.00 Million |
| b) Construction Services for Road Rehabilitation Civil Work | \$137.00 Million |
| c) Highway Construction and Maintenance Equipment | \$ 7.00 Million |

Gulshad-Aksytau Section (ADB)

- | | |
|---|------------------|
| a) Consulting Services for Detailed Design and Construction Supervision | \$ 6.15 Million |
| b) Construction Services for Road Rehabilitation Civil Works | \$ 46.23 Million |
| c) Road Maintenance Equipment, Materials and Manpower | \$ 24.26 Million |
| 1) Road Maintenance Equipment | \$ 12.13 Million |
| 2) Materials | \$ 6.07 Million |
| 3) Manpower | \$ 6.07 Million |

Total Almaty to Astana Road for WB and ADB Projects

- | | |
|---|------------------|
| a) Consulting Services for Detailed Design and Construction Supervision | \$ 14.61 Million |
| b) Construction Services for Road Rehabilitation Civil Works | \$183.23 Million |
| c) Highway Construction and Maintenance Equipment | \$ 19.13 Million |

U.S. Competitiveness

U.S. Consulting Engineering Firms should be very competitive for the supervision and technical advisory services under World Bank Procurement Guidelines. Similarly, U.S. Equipment Manufacturers should be very competitive in providing the required maintenance equipment that will be procured under the Project.

It is anticipated that U.S. Construction Companies in general will not be very competitive though some companies presently working for U.S. Oil Companies in the region may be competitive on this project.

Project Financing

Complete rehabilitation and construction of the Almaty-Astana Highway will cost:

- | | |
|---|-------------------------|
| a) Engineering Construction Supervision & Advisory Services | \$ 63.30 Million |
| b) Construction Services --Civil Works for Rehabilitation | \$ 621.04 Million |
| c) Road Maintenance, Materials and Manpower | <u>\$ 12.26 Million</u> |
| Total Cost | \$ 696.60 Million |

The Karaganda-Aksytau section will have the following financing:

| | |
|--------------------------|----------------------|
| World Bank | \$ 75 Million |
| Government of Kazakhstan | <u>\$ 70 Million</u> |
| Total Cost | \$145 Million |

The Gulshad-Aksytau section will have the following financing:

| | |
|--------------------------|---------------------|
| ADB Funding | \$40 Million |
| Government of Kazakhstan | <u>\$37 Million</u> |
| Total Cost | \$77 Million |

Conclusion

This Project should be attractive to U.S. Engineering Design Firms and Equipment Supply Firms. The Project has moderate potentials for U.S. based Construction Firms since most construction procurement will probably be done locally or regionally.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Department of Roads, Ministry of Transport and Communications (MOTC) |
| Contact Person | S. Larichev |
| Title | Director |
| Address | 86 Gogol Street, Almaty, 480091, Kazakhstan |
| Telephone | (7 3272) 32-47-69 |
| Fax | (7 3272) 32-44-49 |
| E-mail | |

| | |
|------------------------------|---|
| Organization or Company Name | Department of Roads |
| Contact Person | Klimenty Khon |
| Title | Chief Board of Investment Projects |
| Address | 86 Gogol Street, Almaty, 480091, Kazakhstan |
| Telephone | (7 3272) 32-36-61; 32-47-69 |
| Fax | (7 3272) 32-26-79 |
| E-mail | |

256

Profile No. KZ-12

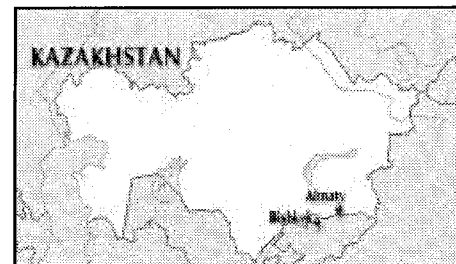
| | |
|------------------------------|---------------------------------------|
| Organization or Company Name | Asian Development Bank |
| Contact Person | Peter W. B. Choynowski |
| Title | Resident Representative |
| Address | 126/128 Panfilov Str., 480091, Almaty |
| Telephone | (7 3272) 63-93-29 |
| Fax | (7 3272) 63-19-12 |
| E-mail | Pchoynowski@asdc.kz |

| | |
|------------------------------|---|
| Organization or Company Name | World Bank |
| Contact Person | Ruslan Mamishev |
| Title | Operations Officer |
| Address | 41 Kazybek Bi St., Bldg. A, 4 th Floor 480100, Almaty |
| Telephone | (7 3272) 60-85-80 |
| Fax | (7 3272) 60-85-81 |
| E-mail | Rmamishev@worldbank.org |

REPUBLIC OF KAZAKHSTAN

ALMATY-BISHKEK ROAD REHABILITATION PROJECT

| Project Summary | |
|--------------------------|---------------------|
| Subsector | Transportation |
| Location | Almaty-Bishkek |
| Project Cost | US\$ 60 Million |
| Export Potential | US\$ 21 Million |
| Project Type | Construction |
| Project Executing Agency | Department of Roads |



Project Outline

The Project consists of the rehabilitation of the road section between Almaty and Bishkek, Kyrgyzstan.

Technical Description

The project consists of the rehabilitation, reconstruction of approximately 150 kilometers of the Almaty-Bishkek Highway. The work will consist of rehabilitating and upgrading the highway to international roadway standards, including bridges, drainage systems, traffic markings, traffic signs and lighting as required. The Project also provides for engineering services for the supervision of the construction works, including advisory assistance to the Department of Highways and Ministry of Transport. The road has had very little maintenance during the last ten years and has not had any significant maintenance and/or repairs for 25 to 30 years. The pavement surface is badly rutted and damaged, the bridges and drainage systems all need rehabilitation or replacement. The road has very little traffic markings and the traffic signing is inadequate.

The existing alignment is generally satisfactory for the rolling terrain given the current traffic volume. However, there are some sections needing improved vertical and horizontal alignment. The road is heavily traveled being the primary highway of the country and does carry significant long-haul truck motor freight.

The scope of the Project comprises:

- a) Supervision of Construction for the Almaty-Bishkek Road.
- b) Civil Works construction and rehabilitation of about 150 kilometers of the road section between Almaty and Bishkek.

258

Project Site

The Project is on the Almaty - Bishkek road corridor. The Project begins at the city of Almaty. The Project ends at the border with Kyrgyzstan.

Project Status/Timeline

The feasibility study for the Project was completed by ADB as part of the Gulshad - Akchatau Road Project, which is now in the implementation stage.

The Construction Supervision and Civil Works construction and rehabilitation contracts are expected to be awarded in the 2nd half of 1999. The construction works will run from 2000 - 2003.

Equipment and Services

The Almaty-Bishkek Road Project will require the following equipment and services:

SERVICES: (\$3.4 million)

- a) Engineering Construction Supervision & Advisory Services
- b) Civil Works Construction Services

EQUIPMENT: (\$17.6 million)

- a) Asphalt Pavement, Plant
- b) Asphalt Paver
- c) Asphalt Distributor
- b) Trucks, Dump, off-road, concrete mixer, asphalt transport, etc.
- c) Compacting equipment, pneumatic, steel wheel, vibratory, etc.
- d) Cranes, rubber tired, crawler
- e) Loader, front-end, Pneumatic and track
- f) Bull Dozer
- g) Earthwork Hauling Equipment
- h) International Signs

U.S. Competitiveness

U.S. firms should be highly competitive in Construction Supervision; medium in Signing and Marking; and low in Civil Works Construction.

Project Financing

FINANCING AGENCIES:

- a) Asian Development Bank (\$40 million)
- b) Government of Kazakhstan (\$20 million)

Conclusion

This Project is very attractive to US Consultants. It will be moderately attractive to US Construction and Equipment Companies already working in this area of the world.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Department of Roads, Ministry of Transport |
| Contact Person | Klimenty Khon |
| Title | Chief Board of Investment Projects |
| Address | 86 Gogol Street, Almaty, 480091, Kazakhstan |
| Telephone | (7 3272) 32-36-61; 32-47-69 |
| Fax | (7 3272) 32-26-79 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | Asian Development Bank, Kazakhstan |
| Contact Person | Peter W. B. Choynowski |
| Title | Resident Representative |
| Address | 126/128 Panfilov Street, P.O. Box 623 480091 Almaty, Republic of Kazakhstan |
| Telephone | (7 3272) 63-93-29 |
| Fax | (7 3272) 63-19-12 |
| E-mail | Pchoynowski@asdc.kz |

260

REPUBLIC OF KAZAKHSTAN

RAILROAD EQUIPMENT & SERVICES

| Project Summary | |
|--------------------------|--|
| Subsector | Rail Transportation |
| Location | Several locations in Kazakhstan |
| Project Cost | US\$ 250 Million |
| Export Potential | US\$ 200 Million |
| Project Type | Procurement & Investment Opportunities |
| Project Executing Agency | Kazakhstan Temir Zholy (KTZ) |



Project Outline

Kazakhstan's national railway company, Kazakhstan Temir Zholy (KTZ) will make substantial improvements to its locomotive and wagon fleet and to its locomotive maintenance plants. KTZ is looking for both equipment and companies to form joint ventures to rebuild and operate the maintenance plants.

Technical Description

KTZ had total revenues of \$1.1 billion in 1997, mainly derived from its freight activity (75%) and employs about 145,000 people. KTZ generated a profit in 1997, but suffers from liquidity problems. This project is to: upgrade the tank wagon fleet; re-power 76 2TE10 locomotives; purchase 160 - 190 new diesel/electric locomotives; modernize the electric locomotive shops; modernize the diesel locomotive shop; build an automated wheel shop; modernize its central computer hardware and software; and privatize the maintenance shops.

USTDA has worked together with EBRD and KTZ to develop a plan to assist KTZ make the transition to a modern, market-oriented railway system. Two feasibility studies have been funded by TDA through EBRD for these tasks. JHWinner, Inc has completed both studies.

Project Site

Railcar repair shops are in Almaty, Astana, and at Aktubinsk. Diesel locomotives would be mostly used in eastern and western Kazakhstan. Tank cars would be mostly used in western Kazakhstan.

Project Status/Timeline

Implementing the institutional reforms through the technical assistance to be provided likely will take 2 - 4 years; the investment program here likely will take from 2000 - 2003.

Equipment and Services

- Shipping oil is one of KTZ's most profitable activities, yet it is short of operational tank cars. Currently 3,000 out of the company's 12,000 tanker cars are out of service for repairs. It will require about \$5 million to rehabilitate the tanker cars.
- KTZ is looking to purchase or repower/rebuild 160 - 190 diesel-electric locomotives.
- KTZ does not have locomotive heavy repair or re-manufacturing facilities. However, an existing diesel-electric workshop could be modernized to handle the re-powering or assembly of the locomotives. The modernization likely would cost \$17 million. Modernizing and upgrading an existing electric locomotive workshop is also planned. This project is expected to cost about \$18 million.
- KTZ must change about 30,000 wheel sets per year due to thin flanges, treads, and flat spots on the wheels. An automated wheel shop would include wheel set handling equipment, a computerized wheel turning machine and related facilities. Estimated cost of the facility is \$9 million.
- KTZ needs to modernize its central computer hardware and software. The estimated cost for this is \$25 - \$30 million.

U.S. Competitiveness

GE has re-powered two 2TE10 locomotives, originally manufactured in Ukraine. GE's re-powering gives twice the horsepower and four times the tractive power, and halves the fuel consumption. Re-powering the same locomotives in Russia does not produce significant improvements in performance. While KTZ is happy with the performance of its repowered locomotives, reliability of the bogie and traction motor components is not as high as they would like. As a result, KTZ is considering purchase of new locomotives (with assembly in Kazakhstan) as well as more complete rebuilding. U.S. companies are highly competitive in producing and selling all the equipment in this project profile worldwide. U.S. engineering consulting firms are also highly competitive in supplying the technical assistance and training required for this project. There is a high probability that U.S. companies could be selected for all the procurements for this project. In the out years, KTZ will be upgrading its electric locomotive fleet, where the European manufactures have the edge.

Project Financing

The EBRD is financing some new maintenance equipment and providing some technical assistance (see previous project profile). However, the items in this project will be financed through the operations of KTZ or financing will be secured by KTZ on the international credit market. With the management and operational reforms underway or soon to take place, KTZ may be in a position to secure such financing at reasonable terms. Moreover, KTZ is a profit-making institution, and this project is spread over several years. With TDA and EBRD technical assistance, KTZ should be able to procure the needed equipment. In addition, KTZ welcomes interested U.S. firms in forming joint ventures, especially for the maintenance shops to be privatized.

Conclusion

The project represents an excellent set of opportunities for U.S. equipment producers, and U.S. firms supplying the relevant consulting services. Moreover, investors with a long time horizon may wish to consider investing in the maintenance facilities that KTZ requires. Investors are urged to complete comprehensive due diligence studies prior to signing a binding agreement.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Kazakhstan Temir Zholy (KTZ) |
| Contact Person | Kanat K. Tulemetov |
| Title | Deputy General Director |
| Address | 127 Furmanov St. 480091 Almaty, Kazakhstan |
| Telephone | (7 3272) 60-44-04 |
| Fax | (7 3272) 50-38-77 |
| E-mail | Tulemetov@railways.kz |

| | |
|------------------------------|--|
| Organization or Company Name | European Bank for Reconstruction and Development |
| Contact Person | Paul Burton |
| Title | Deputy Resident Representative in Kazakhstan |
| Address | Prospect Abaya 10a, 8 th floor 480013 Almaty, Kazakhstan |
| Telephone | (7 3272) 58-14-76 |
| Fax | (7 3272) 58-14-22 |
| E-mail | Burtonp@ata.ebrd.com |

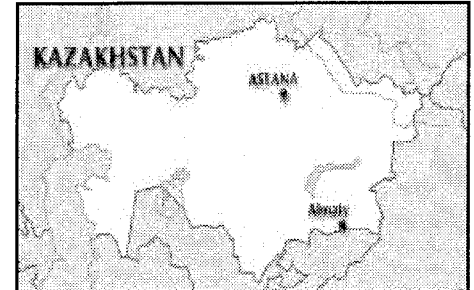
| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | JHWinner Inc. |
| Contact Person | John Winner |
| Title | President |
| Address | 8606 Timber Hill Potomac MD 20854 |
| Telephone | (301) 983-9098 |
| Fax | (301) 983-1848 |
| E-mail | |

264

REPUBLIC OF KAZAKHSTAN

RAILROAD TRACK MAINTENANCE EQUIPMENT & SERVICES

| Project Summary | |
|--------------------------|---------------------|
| Subsector | Rail Transportation |
| Location | Almaty-Astana line |
| Project Cost | US\$ 85 Million |
| Export Potential | US\$ 60 Million |
| Project Type | Railways |
| Project Executing Agency | KTZ, EBRD |



Project Outline

Kazakhstan's national railway company, Kazakhstan Temir Zholy (KTZ) will introduce improved track maintenance methods using modern equipment on the Almaty-Astana line. KTZ will also modernize some of its management operations relating to procurement and maintenance.

Technical Description

KTZ had total revenues of \$1.1 billion in 1997, mainly derived from its freight activity (75%) and employs about 145,000 people. KTZ generated a profit in 1997, but suffers from liquidity problems. This project is to: purchase modern track maintenance equipment; provide technical assistance so that the KTZ is able to conduct an open tendering process; strengthen KTZ's accounting and control skills, create a private track maintenance company; and improve the legal framework to increase private sector participation in the railway sector.

USTDA has worked together with EBRD and KTZ to develop a plan to assist KTZ make the transition to a modern, market-oriented railway system. Two feasibility studies have been funded by TDA through the EBRD for these tasks. JHWinner, Inc has completed both studies.

Project Site

The maintenance equipment is to be used on the Almaty-Astana line. The technical assistance will be done in the field and in Astana, as well as Almaty.

265

Project Status/Timeline

The EBRD has set a Board review date of May 4, 1999. After Board approval, international tenders for the services and equipment should come out before the end of the year or in early 2000. Implementing the institutional reforms through the technical assistance to be provided likely will take 2 – 4 years.

Equipment and Services

KTZ will procure several sets of automated track maintenance equipment. Each set consists of:

Equipment List expected to be financed from the EBRD Loan

| Contracts | Components of Track Maintenance Equipment | Unit No | Total US\$ |
|--|---|-----------|------------|
| 1. Contract for Track maintenance Machines/surfacing equipment | Track Maintenance | 3 | 19,710,000 |
| | Ballast cleaning/undercutting machine | 3 | 8,100,000 |
| | Tamping/lining/straightening machine for track and switches 300-350 km/year | 3 | 4,320,000 |
| | Ballast regulator machine, 300-350 km/year | 3 | 3,240,000 |
| | Dynamic track stabilizer | 3 | 4,050,000 |
| 2. Contract for mechanized sleeper replacement equipment | Mechanical sleeper re-placement set | 3 | 5,989,500 |
| | Sleeper replacement machine | 5 | 1,804,500 |
| | Lifting trucks for rail and road | 10 | 1,440,000 |
| | Mechanism to handle ballast with detachable multifunctional equipment | 5 | 552,500 |
| | Sleeper tamping machine, 200 sleepers per hour | 5 | 1,890,000 |
| | Screw and impact wrench | 20 | 144,000 |
| | Spike puller | 10 | 31,500 |
| 3. Contract for light track Maintenance machines | Spike hammer | 10 | 27,000 |
| | Light Track Maintenance Machines | | 15,025,680 |
| | Shunter with special generator device | 7 | 6,800,400 |
| | Track gang car | 13 | 2,520,180 |
| | Lifting truck for rail and road | 5 | 1,440,000 |
| | Mechanism to handle ballast with detachable multifunctional equipment | 1 | 130,500 |
| | Screw & impact wrench | 100 | 720,000 |
| | Spike puller | 50 | 157,500 |
| | Spike hammer | 50 | 135,000 |
| | Rail cutter | 360 | 810,000 |
| | High speed rail drilling machine | 360 | 972,000 |
| | Grinder of switches | 60 | 486,000 |
| | Grinder of rail profiles | 60 | 378,000 |
| | Machine for grinding rail seams | 60 | 270,000 |
| | Machine for straightening rail seams | 60 | 189,000 |
| Electronic thermometer for measuring rail temperature | 760 | 17,100 | |
| Diagnostic Materials | | 2,475,000 | |
| 4. Contract | Track measurement vehicle | 1 | 855,000 |
| 5. Contract | Railway motor car/by-rail equipment | 5 | 1,620,000 |
| | Repair of old rails | 5 | 10,800,000 |
| 6. Contract | Stationing Equipment for reprovng rail heads | 1 | 3,000,000 |
| 7. Contract | Rail grinding train | 1 | 7,800,000 |
| 7. Contract | Rail grinding train | 1 | 7,800,000 |
| | TOTAL | | 54,000,000 |
| | Contingencies (9%) | | 5,400,000 |
| | Front End Fee (1%) | | 600,000 |
| 7 CONTRACTS | GRAND TOTAL | | 60,000,000 |

266

U.S. Competitiveness

U.S. companies are highly competitive in producing and selling all this equipment worldwide. U.S. engineering consulting firms are also highly competitive in supplying the technical assistance and training required for this project. There is a high probability that U.S. companies could be selected for all the procurements for this project.

Project Financing

A Sovereign-guaranteed loan up to \$60 million from the EBRD to the Government of Kazakhstan, and a grant of up to \$2 million from the EBRD to the Government of Kazakhstan to fund technical cooperation. KTZ will finance the remainder, at this time.

Conclusion

The project represents an excellent set of opportunities for U.S. railway maintenance equipment producers, and U.S. firms supplying the relevant consulting services.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | European Bank for Reconstruction and Development |
| Contact Person | Paul Burton |
| Title | Deputy Resident Representative in Kazakhstan |
| Address | Prospect Abaya 10a, 8 th floor 480013 Almaty, Kazakhstan |
| Telephone | (7 3272) 58-14-76 |
| Fax | (7 3272) 58-14-22 |
| E-mail | Burtonp@ata.ebrd.com |

267

| | |
|------------------------------|--|
| Organization or Company Name | Kazakhstan Temir Zholy (KTZ) |
| Contact Person | Kanat K. Tulemetov |
| Title | Deputy General Director |
| Address | 127 Furmanov St. 480091 Almaty, Kazakhstan |
| Telephone | (7 3272) 60-44-04 |
| Fax | (7 3272) 50-38-77 |
| E-mail | Tulemetov@railways.kz |

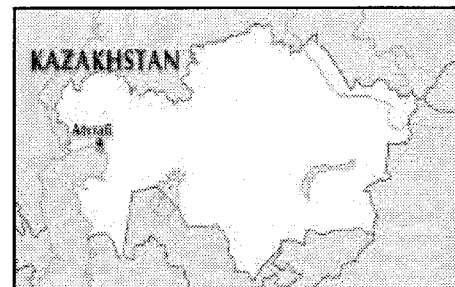
| | |
|------------------------------|--|
| Organization or Company Name | JHWinner Inc. |
| Contact Person | John Winner |
| Title | President |
| Address | 8606 Timber Hill Potomac MD 20854 |
| Telephone | (301) 983-9098 |
| Fax | (301) 983-1848 |
| E-mail | John@winner.potomacmd.us |

268

REPUBLIC OF KAZAKHSTAN

ATYRAU PILOT WATER SUPPLY & SEWERAGE PROJECT

| Project Summary | |
|--------------------------|-------------------------|
| Subsector | Water Supply & Sewerage |
| Location | Atyrau |
| Project Cost | US \$ 19 Million |
| Export Potential | US \$ 9 Million |
| Project Type | Design & Construction |
| Project Executing Agency | Ministry of Agriculture |



Project Outline

The Pilot Atyrau Pilot Water Supply and Sewerage Project consists of five components; (a) rehabilitation of water distribution system in the Prevokzalny area of Atyrau; (b) rehabilitation of the sewerage system in the Prevokzalny area of Atyrau; (c) detailed engineering planning and institutional strengthening; (d) emergency repairs; and (e) preparation of detailed engineering and bid documents for new projects. TDA has providing funding for a study on this project which was carried out by ENSAT.

Technical Description

The Project consist of five components:

Component 1 - Rehabilitation of Water Distribution System in Prevokzalny area of Atyrau City:

- a) Rehabilitation of 2.0 kilometers of 800 mm water transmission line;
- b) Rehabilitation of 7.3 kilometers of water distribution system;
- c) Rehabilitation of pipeworks for basements in 65 buildings;
- d) Identification of all damaged water pipes in system;
- e) Construction of required pumping stations for the system;
- f) Construct 1.2 kilometers of new 600 mm water lines;
- g) Construct 5.0 kilometers of new 500 mm water lines;
- h) Construct 1.0 kilometer inverted siphon water line;
- i) Other necessary works for complete rehabilitation of the system.

269

Component 2 - Rehabilitation of the Sewerage System in Prevokzalny area of Atyrau City:

- a) Rehabilitation of 1.0 kilometer sewerage pipes;
- b) Rehabilitation of 0.5 kilometers of pressure sewer pipes in system;
- c) Rehabilitation of sewerage wells and pumping stations in system;
- d) Construction of 1.4 kilometers of new sewers lines;
- e) Construction of 0.9 kilometers of new pressure sewers.

Component 3 - Detailed Engineering Planning and Institutional Strengthening:

- a) Initial studies of the System;
- b) Detailed engineering design of the Pilot Project System;
- c) Preparation of bid documents for construction of the Pilot Project System;
- d) Project Management and Supervision of Construction of the Pilot Project System;
- e) Technical Studies—including a leak management study, a demand management study, a wastewater management options study, and a study of the corporate status of Vodokanal, including its operation and financial management and revenue collection improvement;
- f) Institutional strengthening of the Vodokanal Bulk Water Company, City Administration and Oblast's executive bodies.

Component 4 - Emergency Repairs:

This component is for small repairs and rehabilitation identified by Vodokanal during project implementation which can make immediate and significant improvements in its operating efficiency.

Component 5 - Project Preparation for a New Project:

- a) Preparation of detailed engineering and bid documents;
- b) formulation of city development and investment plan;
- c) Technical assistance for financial and account strengthening of Vodokanal;
- d) Study tour of water companies in Europe by Vodokanal, City Administration and PIU Staff.

Project Site

The Project is in the Prevokzalny area of Atyrau City in Kazakhstan.

Project Status/Timeline

The engineering design and technical assistance is presently under way for the Project. The actual rehabilitation contracts are just now starting to be bid under the World Bank Guidelines.

270

Equipment and Services

| | | |
|--|---|---------------|
| Engineering Design and Technical Services | = | \$1.5 Million |
| Construction Services, Commodities and Equipment | = | \$7.0 Million |

U.S. Competitiveness

This Project is partially financed by a USAID Grant, therefore the engineering services will be from U.S. consulting firms. U.S. construction firms can participate in the construction services contract under international bidding procedures. U.S. suppliers should be interested in the pipes, pumping stations, water meters, etc. It is most difficult to estimate the breakdown of each item of work under such a project.

Project Financing

The Project will be financed by the World Bank, USAID and the Government of the Republic of Kazakhstan. The total cost is estimated to be US\$ 19.0 million

| | | |
|---|---|----------------|
| International Bank for Reconstruction and Development | = | \$14.6 Million |
| USAID | = | \$ 1.5 Million |
| Government of the Republic of Kazakhstan | = | \$ 2.9 Million |
| Total Project Cost | = | \$19.0 Million |

Conclusion

This is a project that should interest all engineering consultants and construction firms interested in implementation of international water supply and sanitation projects. The UNDP is coordinating development initiatives financed by the International Financial Institutions and Donors in Atyrau, and is a good source of information.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Agriculture, PICGCWR |
| Contact Person | Serikbay Smailov |
| Title | Head of PICGCWR |
| Address | Rooms 10, 15, 124 Bogenbay Batyr St, Almaty, Kazakhstan |
| Telephone | (7-32272) 62-62-59; 62-23-10 |
| Fax | (7-3272) 623-983 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | The World Bank-Resident Mission in Kazakhstan |
| Contact Person | Ruslan Mamishev |
| Title | Operations Officer |
| Address | 41 Kazybek Bi Street, Building A, 4 th floor Almaty 480100 Republic of Kazakhstan |
| Telephone | (7-3272) 60-85-80 |
| Fax | (7-3272) 60-85-81 |
| E-mail | Rmamishev@worldbank.org |

| | |
|------------------------------|--|
| Organization or Company Name | United Nations Development Program |
| Contact Person | Knut Ostby |
| Title | Deputy Resident Representative |
| Address | KIMEP, 4 Adai Avenue Almaty 480100, Kazakhstan |
| Telephone | (7-3272) 64-09-70 |
| Fax | ((73272) 64-26-08 |
| E-mail | Ko@un.almaty.kz |

REPUBLIC OF KAZAKHSTAN

ATYRAU AIRPORT REHABILITATION

Project Summary

| | |
|--------------------------|-----------------------|
| Subsector | Transportation |
| Location | Atyrau |
| Project Cost | US\$ 50 Million |
| Export Potential | US\$ 24 Million |
| Project Type | Construction |
| Project Executing Agency | Ministry of Transport |



Project Outline

Rehabilitation of the runways, taxiways, aprons, NavAids and passenger and cargo terminal buildings.

Technical Description

The Project requires an update of Government feasibility report done several years ago that detailed the design of the strengthening, widening and lengthening of the existing runways, taxiways and aprons. The airport needs completely new all-weather NavAids to be designed, procured and installed. The passenger terminal, parking areas and cargo handling facilities all need to be rebuilt. Moreover, as the oil industry in the north Caspian Sea area develops, new cargo handling facilities will be required.

The runway, taxiways and parking areas will have to be designed to handle the latest airplane models of Boeing 777 and Airbus 320 because the oil industry expects Atyrau to be the urban center supporting all development in the north Caspian. At this point, all indicators are that the oil reserves in the north Caspian are very large. The first test drilling will commence this spring and the extent of the reserves will be better known by the end of 1999.

Project Site

International Airport for Atyrau City in Western Kazakhstan is on northern edge of Caspian Sea. It is the airport that will serve the development of the northern offshore Caspian Sea oil.

273

Project Status/Timeline

The Government of Kazakhstan has assigned a high priority to upgrading and rehabilitating the International Airport for Atyrau City to support development of the surrounding area. They are requesting assistance from the World Bank, EBRD and all other interested parties, including help from the oil companies who will be primary users of the new airport. A new feasibility study should be completed this year, the design in 2000, and the construction 2001 - 2004.

Equipment and Services

The Atyrau Airport will require the following goods and services from foreign sources:

| | |
|-----------------------------|------------------------|
| SERVICES: | \$ 6.20 million |
| a) Feasibility Study | \$ 0.50 million |
| b) Detailed Design | \$ 2.50 million |
| c) Supervision Construction | \$ 2.70 million |
| d) NavAids | \$ 0.25 million |
| e) Lighting System | \$ 0.25 million |

| | |
|---|------------------------|
| EQUIPMENT: | \$17.80 million |
| a) Concrete Pavement, Plant and Equipment | |
| b) Asphalt Pavement, Plant and Equipment | |
| c) Trucks, Dump, Concrete Mixer, Cement Hauler, Asphalt, etc. | |
| d) Compaction Equipment, Pneumatic, steel, vibratory, etc. | |
| e) Cranes, Tower | |
| f) Cranes, Hydraulic, Tower, Boom Type | |
| g) Loaders, Front-end. Pneumatic, Tract Type | |
| h) NavAids | |
| i) Lighting Equipment | |
| j) Snow Removal Equipment | |
| k) Airfield and Road Maintenance Equipment | |

U.S. Competitiveness

U.S. competitiveness for the procurement list is as follows:

- a) Feasibility Study (High)
- b) Detailed Engineering Design (High)
- c) Supervision of Construction (High)
- d) Civil Works Construction (Low)
- e) NavAids Procurement and Installation (High)
- f) Lighting Procurement & Installation (High)

Project Financing

The breakdown of the estimated capital costs is as shown below:

| | | |
|----|--------------------------|-----------------------|
| a) | Feasibility Study | \$ 0.5 million |
| b) | Detailed Design | \$ 2.5 million |
| c) | Supervision Construction | \$ 2.7 million |
| d) | Construction | <u>\$44.3 million</u> |
| | Total Costs | \$50.0 million |

The financing for the Project will be provided by International Donors including the World Bank, EBRD, and possible some participation from the international oil companies.

Financing information should be available sometime later this year or early 2000. This is a very good project for BOT and a combination of public and private funding.

Conclusion

The item that will make this project absolutely essential is a major oil and gas find in the northern Caspian Sea. If a major oil find is not made, the airport upgrading will be required, but with much less need for additional passenger and cargo handling facilities.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Ministry of Transport & Communications |
| Contact Person | Bilimzhan Rysmendeyeva |
| Title | Chief, International Relations & Cooperation Division |
| Address | Astana, Kazakhstan |
| Telephone | (7-3272) 32-42-56 |
| Fax | (7-3272) 32-42-25 |
| E-mail | |

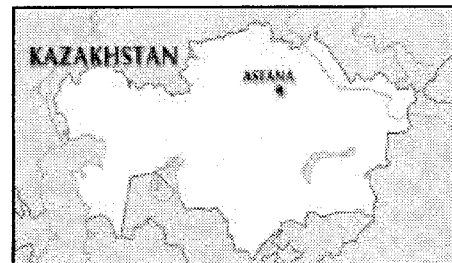
275

REPUBLIC OF KAZAKHSTAN

ASTANA AIRPORT REHABILITATION

Project Summary

| | |
|--------------------------|-----------------------|
| Subsector | Transportation |
| Location | Astana |
| Project Cost | US\$ 40 Million |
| Export Potential | US\$ 16 Million |
| Project Type | Construction |
| Project Executing Agency | Ministry of Transport |



Project Outline

This project involves improvements to the International Airport in the Capital City of Astana.

Technical Description

A detailed feasibility study for improvements to the Astana Airport was completed by the Japanese Aid Program in 1998. The OECF has developed and funded a Loan Project to finance the design and reconstruction of the Astana Airport

The Project includes the design and construction of improvements to the Airport's runways, taxiways, parking aprons, support facilities, and access roads to the terminal. The Project also includes a complete upgrade of the air navigation control and landing systems. The plans are to finance improvements to the terminal buildings, increasing the capacity of the airport to 30,000 passengers per year.

The Project includes efforts to privatize the airport's operation, terminal, air cargo and other operating facilities.

Project Site

The Airport is located near Kazakhstan's new capital city of Astana which is approximately 800 kilometers northwest of the old capital city of Almaty.

276

Project Status/Timeline

The project loan is presently under negotiation with the Japanese Government and is expected to be executed in 1999. The contracts to design the improvements likely will be awarded in late 1999. The contracts for the construction improvements are expected to begin in late 2000 and be completed in 2004.

Equipment and Services

The Astana Airport will require the following goods and services from both local and foreign sources:

SERVICES: \$ 4.42 million

- | | | |
|----|--------------------------|-----------------|
| a) | Detailed Design | \$ 1.82 million |
| b) | Supervision Construction | \$ 2.2 million |
| c) | NavAids | \$ 0.2 million |
| d) | Lighting System | \$ 0.2 million |

EQUIPMENT: \$ 11.8 million

- | | |
|----|--|
| a) | Concrete Pavement, Plant and Equipment |
| b) | Asphalt Pavement, Plant and Equipment |
| b) | Trucks, Dump, Concrete Mixer, Cement Hauler, Asphalt, etc. |
| c) | Compaction Equipment, Pneumatic, steel, vibratory, etc. |
| d) | Cranes, Tower |
| e) | Cranes, Hydraulic, Tower, Boom Type |
| f) | Loaders, Front-end. Pneumatic, Tract Type |
| g) | NavAids |
| h) | Lighting Equipment |
| i) | Snow Removal Equipment |
| j) | Airfield and Road Maintenance Equipment |

U.S. Competitiveness

U.S. Companies are eligible to bid on most OECF Projects, usually in cooperation with Japanese Companies. Therefore, all U.S. consultant firms and construction companies who normally bid on overseas projects will or should have an interest in this Project.

U.S. firms are expected to be competitive for the engineering and design services contracts. U.S. firms are also expected to be competitive for the construction services contracts for all airport construction elements. Their competitive position will be enhanced if they partner with a company headquartered in Japan.

U.S. firms are expected to be competitive for the following types of equipment that will be installed at the new airport:

1. Terminal support equipment
2. Lighting systems for both terminal areas and airfield pavements.
3. Navigational Aids for navigation, landings and takeoffs of aircraft.
4. New aircraft support equipment.
5. Construction excavation, compaction and concrete and asphalt paving equipment.

Project Financing

The total cost of the Astana Airport Rehabilitation Project is expected to be approximately \$300 million. The cost of engineering and technical design and construction supervision services is expected to be about \$20 million. The cost of construction services is expected to be \$200 million. The cost of equipment and services is expected to be \$80 million. CH2MHill (a U.S. company) conducted a feasibility study. Funding for the project will come from the OECF and the Government of Kazakhstan. OECF Project Support staff for Kazakhstan is located in Tokyo, Japan.

Conclusion

This Project is in the final stages of negotiation between the Governments of Japan and Kazakhstan, the loan is expected to be approved and the Project implemented beginning late this year.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Transport and Communications Committee on use of Airspace and Civil Aviation |
| Contact Person | Bilimzhan Rysmendeyeva |
| Title | Chief, International Relations & Cooperation Division |
| Address | Astana, Kazakhstan |
| Telephone | (7 3172) 32-42-56 |
| Fax | (7 3172) 32-42-25 |
| E-mail | |

| | |
|------------------------------|------------------------------|
| Organization or Company Name | International Astana Airport |
| Contact Person | |
| Title | |
| Address | Post Box 553, Astana, 473026 |
| Telephone | (7 3172) 33 37 09 |
| Fax | (7 3172) 33 37 41 |
| E-mail | |

REPUBLIC OF KAZAKHSTAN

TELECOMMUNICATIONS EQUIPMENT

| Project Summary | |
|--------------------------|--------------------|
| Subsector | Telecommunications |
| Location | Almaty |
| Project Cost | US\$ 20 Million |
| Export Potential | US\$ 20 Million |
| Project Type | Procurement |
| Project Executing Agency | Nursat |



Project Outline

Nursat is looking to procure and have installed a Third Generation (3G) Wireless Local Loop in Almaty.

Technical Description

Nursat is a Kazakh-American joint venture that has established the first fully digital, nationwide telecommunications network in Kazakhstan. With nodes in over 20 cities, Nursat is the leading corporate telecom solutions provider in Kazakhstan and the largest Internet service provider in Kazakhstan.

Nursat is looking to continue to roll-out its strategy of becoming the dominant second national operator in Kazakhstan through the implementation of Third Generation (3G) Wireless Local Loop (WLL) in Almaty, Kazakhstan.

The telecom market in Almaty continues to grow dramatically with significant demand both from individuals and businesses for a "converged basket" of telecom solutions including digital fixed voice, value added voice services (e.g. voice mail, caller ID, three-way calling, etc), Internet and potentially other multimedia services.

The roll-out of WLL in Almaty will in the first phase have a potential of 20,000 subscribers with the potential to make an even greater market with aggressive pricing.

Available frequency spectrum is in the 800 Mhz range, and anything above 1.9 Ghertz is acceptable.

Successful roll-out of this project will lead to other WLL installations in Kazakhstan.

280

Nursat is looking for a wideband CDMA solution that is significantly field proven and cost less than \$500 per subscriber.

Nursat has installed a Lucent Technologies 5ESS 2000 switch and prefers a V5.2 interface.

Flexibility in configuration of Customer Premises Equipment (CPE) is needed for a range of customers from multi-line business subscribers to single-line POTS service.

Initial capacity will be 20,000 subscribers.

Project Site

Almaty, Kazakhstan.

Project Status/Timeline

Nursat is looking to implement this project by fourth quarter 1999 with launch of the service in January 2000.

Equipment and Services

Nursat is looking for a supplier of digital fixed wireless equipment as stated above in the technical section.

U.S. Competitiveness

US firms are leading the way in the development of WLL products and should be able to compete effectively.

Project Financing

Nursat is looking to work closely with the supplier to locate debt financing utilizing existing banking relationships of Nursat and US Ex-Im financing.

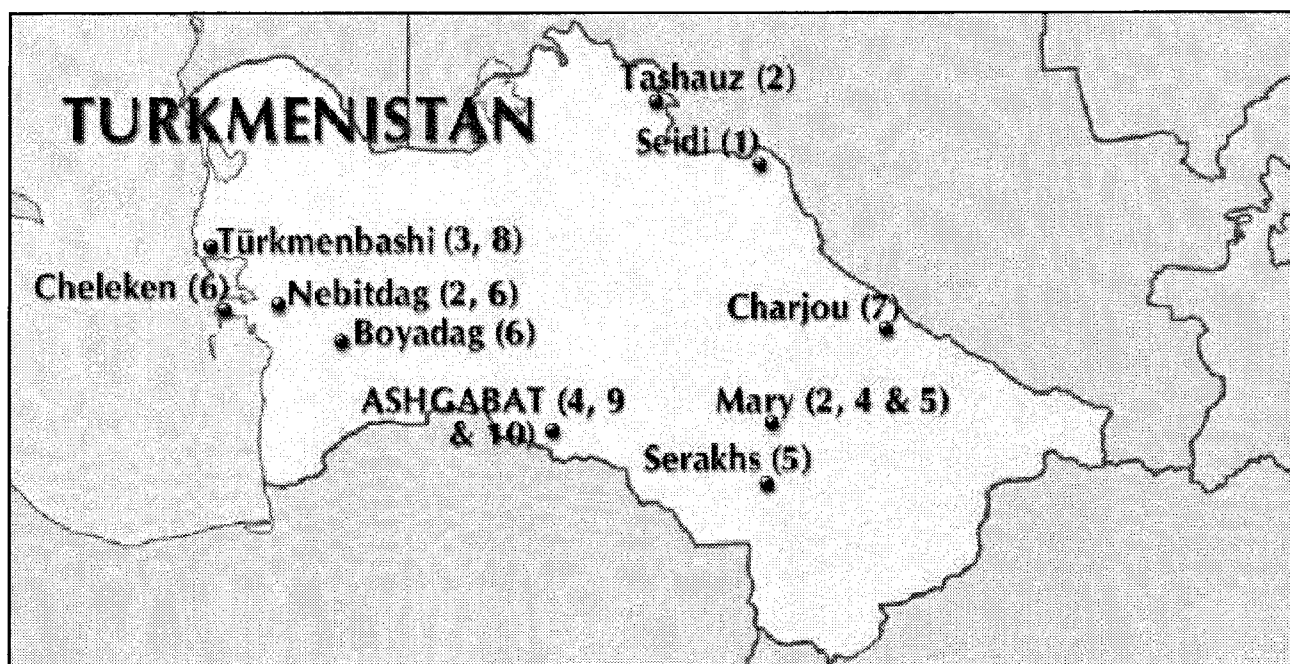
Conclusion

The WLL project in Almaty is a unique opportunity to capture a growing telecom market. Nursat, as a leading player in Kazakhstan's telecom market, is looking for a world-class equipment supplier who can work with Nursat to pull together the technical and financial details of the deal.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | Nursat-Kazinformtelecom/Lucent Technologies |
| Contact Person | Curt Hopkins |
| Title | Chief Financial Officer |
| Address | 597 Seifullin, 7 th Floor, Almaty, KZ |
| Telephone | (7-3272) 60-90-30 |
| Fax | (73272) 60-81-20 |
| E-mail | Hopkins@nursat.net |





TURKMENISTAN PROJECTS

| MAP NO. | PROFILE NO. | PROJECT NAME | LOCATION |
|---------|-------------|---------------------------------------|-----------------------------|
| 1. | TU1 | Seidi Oil Refinery Rehabilitation | Seidi |
| 2. | TU2 | Thermal Power Plants | Tashauz, Mary and Nebitdag |
| 3. | TU3 | Turkmenbashi Port Rehabilitation | Turkmenbashi |
| 4. | TU4 | Ashgabat-Mary Road Rehabilitation | Ashgabat to Mary |
| 5. | TU5 | Mary Aluminum Plant Construction | Mary and Serakhs |
| 6. | TU6 | Iodine & Bromine Production | Cheleken, Nebitdag, Boyadag |
| 7. | TU7 | Charjou Carbomide Production Plant | Charjou |
| 8. | TU8 | Turkmenbashi Steel Pipe Production | Turkmenbashi |
| 9. | TU9 | Crop Protection & Veterinary Services | Nationwide |
| 10. | TU10 | Farm Restructuring Support | Nationwide |

REPUBLIC OF TURKMENISTAN

SEIDI OIL REFINERY REHABILITATION

Project Summary

| | |
|--------------------------|-------------------------------------|
| Subsector | Oil Refinery |
| Location | Seidi |
| Project Cost | US\$ 104 Million |
| Export Potential | TBD by Investor |
| Project Type | Investment Opportunity |
| Project Executing Agency | State Oil & Gas Trading Corporation |



Project Outline

Under a 1997 Presidential decree, the Government of Turkmenistan would like to attract foreign sponsors to rehabilitate the Seidi oil refinery at an estimated cost of \$104 million, while keeping interruptions to current production to a minimum. Financing arrangements have not yet been worked out.

Technical Description

The Seidi oil refinery was designed and built with an annual capacity to process 6,000,000 tons of crude oil, with a module to produce 1,000,000 tons annually of high-octane automobile gasoline. It was put into operation in 1991, producing low-octane gasoline, high-sulphur diesel engine fuel and fuel oil, products found to be uncompetitive and difficult to sell. The high-octane module was never brought on line.

The GOT wants to rehabilitate the refinery to its original specifications by modernizing the existing equipment, while keeping interruptions to current production to a minimum.

Project Site

Seidi, Turkmenistan

Project Status/Timeline

There is no specific timetable for the project although it has high priority for the Government of Turkmenistan, which wants to increase value-added in its oil exports.

Equipment and Services

The rehabilitation of the refinery would be based on utilizing the capacity of the existing modules and process management system as originally designed.

The concept would be for the foreign sponsor to optimize this existing equipment by supplying 'know-how' and some special equipment. A feasibility study would be required to determine how this might be done.

U.S. Competitiveness

U.S. companies contemplating sponsorship of this project should consider linking up with a Turkmen partner.

Project Financing

Interested foreign sponsors are invited to make bids to finance the project as a "turnkey" operation. Bidders should bring to the table their own financing and proposals as to how they would recoup their investment.

Conclusion

The viability of the project would have to be determined through a feasibility study that would consider marketing aspects. As a priority project for the GOT, the sponsor might be able to negotiate unimpeded current account convertibility as part of the BOT agreement. But the fact that it has not moved since 1997 is not a good sign.

Key Decision Makers

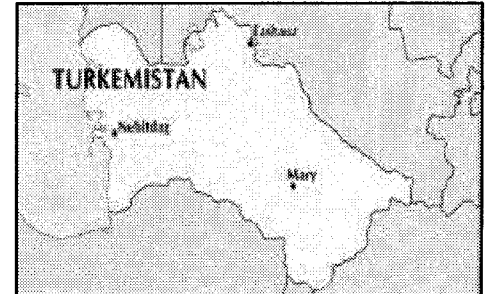
| | |
|------------------------------|--|
| Organization or Company Name | Ministry of Oil & Gas |
| Contact Person | Khoshgeldy Babaev |
| Title | Deputy Minister |
| Address | 28 Neutral Turkmenistan Street, Ashgabat |
| Telephone | (993 12) 39-38-22 |
| Fax | (993 12) 51-04-43 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | State Oil & Gas Trading Corporation |
| Contact Person | Berdymurad Rejepov |
| Title | Chairman, Minister |
| Address | 28 Neutral Turkmenistan Street, Ashgabat |
| Telephone | (993 12) 39-38-35; 51-04-60 |
| Fax | (993 12) 39-59-70 |
| E-mail | |

REPUBLIC OF TURKMENISTAN

THERMAL POWER PLANTS

| Project Summary | |
|--------------------------|-------------------------------|
| Subsector | Power |
| Location | Tashauz, Mary and Nebitdag |
| Project Cost | US\$ 700 Million |
| Export Potential | US\$ 150 Million |
| Project Type | Investment Opportunities |
| Project Executing Agency | Ministry of Energy & Industry |



Project Outline

This project deals with rehabilitation and construction of three major power plants in Turkmenistan. Project 1 calls for the construction of a combined cycle gas-fired plant in Tashauz. Project 2 deals with the reconstruction of the Mary Power Generation Plant. Project 3 is the construction of a new electrical power generation plant in Nebitdag.

No international financing has been established for any of these projects yet and vendors will be expected to come up with their own financing schemes.

Technical Description

The specifications for each of the three plants will be as follows:

Project 1: (Project Cost \$175 million)

The plant would be a 350 MW combined cycle, gas-fired plant consisting of two 125 MW Gas Turbine Generators and one 100 MW Steam Turbine Generator.

Project 2: (Project Cost \$350 million)

The project would be to upgrade an existing 4x215 MW plant. Since the cost of upgrading a steam turbine plant is about the same (\$400 per kWh) as putting in a new gas-fired combined cycle plant (which has higher fuel efficiencies of up to 60%), the Government may decide to replace the existing coal-fired plant with a new gas-fired combined cycle plant.

Project 3: (Project Cost \$175 million)

Construction of a new electrical power generation plant which would use local natural gas and have a capacity of 350 to 400 MW.

Project Site

Project 1: Tashauz

Project 2: Mary

Project 3: Nebitdag

Project Status/Timeline

The Ministry of Energy & Industry lists all three projects as high priority projects and open for investment during the next 10 years. The extended time frame has to do with excess generation capacity in the wake of a drop in export demand following independence.

Equipment and Services

If gas-fired combined cycle plants are installed in all three locations, the following equipment will be procured:

- Boilers, Gas Fired
- Steam Turbines
- Generators, 50 Hz
- Condensers, Water Cooled
- Cooling Towers
- Circulating Water Pumps
- Feedwater Heaters
- Condensate Pumps
- Instrumentation
- Computerized Control Systems
- Emission Control Equipment
- Water Pollution Control Equipment
- Boiler Feedwater Treatment Systems
- Electrical Equipment including Station Transformer, Switchyard and Switchgear

U.S. Competitiveness

U.S. competitiveness in this project will depend on the source of financing. If the project sponsor is American or project financing can be identified that does not require specific country sourcing, U.S. competitiveness will be good. U.S. firms should be especially competitive in the supply of: Computerized control systems; instrumentation; emissions control equipment; and catalytic/non-catalytic pollution reduction equipment.

Project Financing

No sources of financing have been identified. Vendors will be expected to come up with their own financing proposals.

Conclusion

Given prevailing excess energy capacities and lost regional export markets in recent years in Turkmenistan, it is anticipated that these power plant projects will be postponed until such time as electricity demand picks up.

Key Decision Makers

| | |
|------------------------------|-------------------------------|
| Organization or Company Name | Ministry of Energy & Industry |
| Contact Person | Tore Akhunov |
| Title | First Deputy Minister |
| Address | 6, Pomma Street Ashgabat |
| Telephone | (993 12) 39-07-63 |
| Fax | (993 12) 39-47-14 |
| E-mail | |

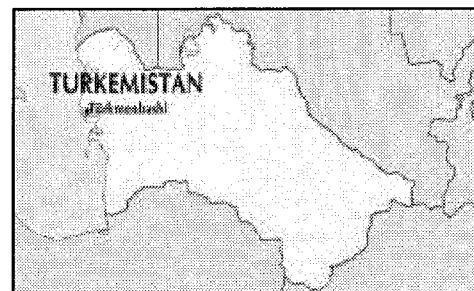
| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | State Agency for Foreign Investments |
| Contact Person | Emir K. Kuliev |
| Title | Vice-Director |
| Address | 53, Azadi Street Ashgabat |
| Telephone | (993 12) 39-10-54 |
| Fax | (993 12) 35-04-16 |
| E-mail | |

289

REPUBLIC OF TURKMENISTAN

TURKMENBASHI PORT REHABILITATION

| Project Summary | |
|--------------------------|----------------------------------|
| Subsector | Maritime Transport |
| Location | Turkmenbashi |
| Project Cost | US\$ 42 Million |
| Export Potential | US\$ 30 Million |
| Project Type | Port rehabilitation |
| Project Executing Agency | Turkmen Sea Administration (TSA) |



Project Outline

EBRD is providing a loan of \$30 million toward a total project cost of \$42 million for the reconstruction, rehabilitation and supply of equipment to Turkmenbashi Port. The balance of the cost will be borne by the Turkmen Sea Administration (with a sovereign loan guarantee).

Technical Description

The project consists of the following parts:

- Rehabilitation of the Ferry Terminal (one berth)
- Reconstruction of the Main Port facilities, including new storage facilities, rehabilitation of utility services and reconstruction of general cargo terminal (three berths) and dry bulk terminal (one berth)
- Rehabilitation of Cranes and Cargo Handling Equipment
- Construction of Container Terminal, including cargo handling facilities (financed separately from an EU-TACIS grant of \$1.25 million)

Project Site

Turkmenbashi Port is Turkmenistan's main port facility on the Caspian Sea.

290

Project Status/Timeline

The EBRD loan is effective. Revision of the scope-of-work for the activity is underway. Construction works pre-qualifications of Turkmen companies are almost completed. The list should be available by April 1999. International tendering for equipment and construction supervision should occur by July 1999, and contract award by December 1999.

Equipment and Services

Cranes
Cargo Handling Equipment
Terminal and Storage Facility Reconstruction
Container Terminal Construction and Equipment

U.S. Competitiveness

U.S. competitiveness is considered to be good.

Project Financing

EBRD: \$30 million
EU-TACIS: \$1.25 million
TSA: \$10.75 million

Conclusion

The project holds good potential for U.S. companies. A local partner is advised.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|--------------------------|
| Organization or Company Name | Turkmen Sea Agency (TSA) |
| Contact Person | Halmamed Durdyev |
| Title | President |
| Address | |
| Telephone | (993 24) 32-38-43 |
| Fax | (993 24) 32-38-43 |
| E-mail | |

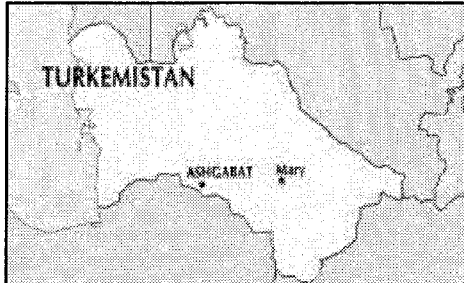
| | |
|------------------------------|-----------------------------------|
| Organization or Company Name | Project Implementation Unit |
| Contact Person | Evdokiya Kamneva/Elena Kakovleva |
| Title | Leading Engineer/Local Consultant |
| Address | |
| Telephone | (993 24) 32-38-43 |
| Fax | (993 24) 32-38-43 |
| E-mail | elenayak@cat.glasnet.ru |

| | |
|------------------------------|----------------------------|
| Organization or Company Name | EBRD |
| Contact Person | Jaap Spey |
| Title | Resident Representative |
| Address | 95, Azadi Street, Ashgabat |
| Telephone | (993 12) 35-66-17 |
| Fax | (993 12) 51-22-63 |
| E-mail | spey@asb.ebrd.com |

REPUBLIC OF TURKMENISTAN

ASHGABAT-MARY ROAD REHABILITATION

| Project Summary | |
|--------------------------|--------------------------------------|
| Subsector | Highways |
| Location | Ashgabat-Mary |
| Project Cost | US\$ 112 Million |
| Export Potential | US\$ 50 Million |
| Project Type | Road rehabilitation |
| Project Executing Agency | Turkmen Highways State Department |



Project Outline

The GOT has obtained a \$50 million loan from the EBRD to support the rehabilitation of sections 1 and 2 and \$25 million from the Kuwait Fund for Arabic Development (KFAD) and the Islamic Development Bank (IsDB) to support the rehabilitation of section 3 of the main road between Ashgabat and Mary, Turkmenistan.

Technical Description

The civil works comprise the rehabilitation of 350 km of the road between Ashgabat and Mary, about 40% of which will require reconstruction and the remainder repaving. The project also will finance the repair of the bridges along the route and limited upgrading of the dual carriageway in the vicinity of Ashgabat and Mary.

Project Site

The road from the capital, Ashkatbat to the major industrial city of Mary is to be rehabilitated as follows. There will be four works contracts: (1) 125 km Ashgabat - Kaahka (EBRD); (2a) 85 km Kahka - Hauzhanski Canal (EBRD); (2b) 42 km Tedjen - Hauzhanski Canal (EBRD); and (3) 100 km Hauzhanski Canal - Mary (KFAD).

293

Project Status/Timeline

The \$50 million EBRD loan awaits a planned increase in gasoline prices by the GOT; the international tendering deadline has been extended to April 1, 1999.

Equipment and Services

Equipment:

Asphalt plant
Crushing plant
Asphalt pavers
Rollers

Services:

Construction supervision

It is anticipated that the bulk of the \$50 million of EBRD financing from the EBRD would be slated for import of equipment and services.

U.S. Competitiveness

U.S. competitiveness for this project is considered to be fair for construction and equipment procured by international tender. A local partner would be advisable.

Project Financing

| | |
|----------------|--------------|
| EBRD: | \$50 million |
| KFAD and IsDB: | \$25 million |
| GOT: | remainder |

Conclusion

It is anticipated that the policy conditionality for the EBRD loan will be met by April 1, 1999.

294

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|-----------------------------------|
| Organization or Company Name | Turkmen Highways State Department |
| Contact Person | Nurmurad Kulmuradov |
| Title | State Minister |
| Address | Pöwrüz Street km 1, Ashgabat |
| Telephone | (993 12) 34-84-16 |
| Fax | (993 12) 34-52-77; 36-25-90 |
| E-mail | |

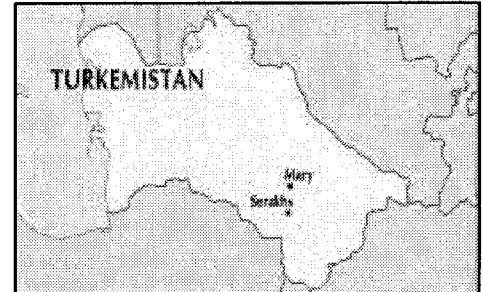
| | |
|------------------------------|--|
| Organization or Company Name | Design Institute Turk mendorproekt |
| Contact Person | Ms. O. Brozda |
| Title | Director |
| Address | Pöwrüz Street km 1, Ashgabat |
| Telephone | (993 12) 34-52-77/36-25-44 |
| Fax | (993 12) 36-25-90/34-52-77 |
| E-mail | wsatkins@cat.glasnet.ru |

REPUBLIC OF TURKMENISTAN

MARY ALUMINUM PLANT CONSTRUCTION

Project Summary

| | |
|--------------------------|-------------------------------|
| Subsector | Industry |
| Location | Mary |
| Project Cost | US\$ 300 - 700 Million |
| Export Potential | TBD by Investor |
| Project Type | Construction |
| Project Executing Agency | Ministry of Energy & Industry |



Project Outline

This project is for construction of an aluminum plant in Mary, Turkmenistan, to produce 150,000 tons of aluminum per year. TDA is financing a feasibility study to be conducted by Bechtel. Additional components favored by the Ministry of Energy & Industry would include facilities to quarry and process the bauxite ore domestically. U.S. companies could be competitive if Ex-Im Bank export financing were lined up.

Technical Description

The Mary aluminum plant would produce 150,000 tons of aluminum per year. It is to be located near the Mary electrical power plant, near Turkmenistan's eastern gas natural gas fields. The Mary power plant has the capacity to produce 10 bil KW per year and is only operating at 50% capacity.

Raw materials could either be procured from neighboring countries, or mined and processed domestically, depending on the results of a feasibility study being carried out by Bechtel, financed by TDA. Ministry authorities have expressed an interest in adding project components to mine the bauxite ore and process it into alumina, to be used as raw material for aluminum production.

Project Site

The aluminum plant would be located near the Mary electrical power plant in eastern Turkmenistan. Railroad facilities and a ready supply of water are nearby. If the decision is made to mine and process bauxite ore domestically, one proposal is to locate the alumina processing facility in Serakhs City, south of Mary, and build a railway to the quarry site in Zulfagar, 120 kms away.

2910

Project Status/Timeline

A pre-feasibility study was carried out by a St. Petersburg scientific institute. TDA has approved a feasibility study that is being conducted by Bechtel. The complex is expected to be completed and put into operation by 2003.

Equipment and Services

The Bechtel feasibility study will determine the equipment and services that will be required to construct the Mary aluminum plant. Pending the results of this study, the cost of this component of the project is projected to be roughly \$300 - \$350 million.

The component to construct a chemical and thermal processing facility to produce 300,000 of alumina annually would cost roughly \$250 million. Development of the quarry at Zulfagar would require machines, tools and explosives with an annual capacity to mine 2 million tons of bauxite annually. A 120 km railroad link would have to be built to spur to connect the quarry to the alumina processing plant at Serakhs City. Pending the results of the feasibility study, this component would cost roughly \$100 million.

U.S. Competitiveness

U.S. companies will be interested in the components which involve site selection and design of the aluminum and alumina processing plants; and the supply of machinery to the plants. Most of the equipment and services for quarry development and construction of transportation infrastructure would be procured domestically.

This project could be quite competitive for U.S. vendors if financing is provided by Ex-Im Bank. TDA's feasibility study is a positive indication for American companies' competitiveness.

Project Financing

No financing has been identified yet but the Government is interested in a production-sharing arrangement with a foreign investor.

297

Conclusion

This project could hold potential for U.S. vendors, if they can be assured of export financing guaranteed by Ex-Im Bank.

Key Decision Makers

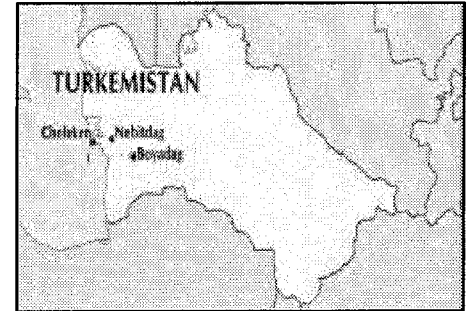
| | |
|------------------------------|-------------------------------|
| Organization or Company Name | Ministry of Energy & Industry |
| Contact Person | Tore Akhunov |
| Title | First Deputy Minister |
| Address | 6, Pomina Street Ashgabat |
| Telephone | (993 12) 39-38-22 |
| Fax | |
| E-mail | |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | State Agency for Foreign Investments |
| Contact Person | Emir K. Kuliev |
| Title | Vice-Director |
| Address | 53, Azadi Street Ashgabat |
| Telephone | (993 12) 39-10-54 |
| Fax | (993 12) 35-04-16 |
| E-mail | |

REPUBLIC OF TURKMENISTAN

IODINE & BROMINE PRODUCTION

| Project Summary | |
|--------------------------|---|
| Subsector | Industry |
| Location | Cheleken, Nebitdag, Boyadag, Gograndag |
| Project Cost | US\$ 15 - 16 Million |
| Export Potential | TBD by Investor |
| Project Type | Restructuring & privatization |
| Project Executing Agency | Ministry of Energy & Industry |



Project Outline

With restructuring and privatization of its existing iodine and bromine production industry, Turkmenistan's proven reserves of hydro-mineral raw materials could allow the country to sustain production levels accounting for 24% of world iodine production, and 7-8% of world bromine production.

Technical Description

In the early 1990s Turkmenistan's annual iodine production made it the fourth-largest world producer. Production since then has fallen by more 94% due in part to old equipment and inefficient technology installed during the Soviet period. The estimated required investment to bring production levels back to previous levels is \$15 - \$16 million, by installing mobile iodine-producing modules near to the deposits, significantly reducing costs. The projected cost of producing one ton of iodine would be \$7.50.

Project Site

Current exploitation of iodine-bromine-containing waters centers on Western Turkmenistan (Cheleken, Boyadag, Nebitdag-Monjukley and Gograndad-Karadashley deposits).

Project Status/Timeline

Bringing the project to fruition with foreign financing is likely to require privatization of the industry, which at the moment the GOT appears not to be considering. With privatization in prospect, the next step would be a feasibility study.

Equipment and Services

The project concept is to introduce mobile iodine-producing modules near the production site. A feasibility study would be required to determine the exact nature of demand for equipment and services should this project go forward.

U.S. Competitiveness

American companies are strongly encouraged by Turkmenistan authorities to invest in this project

Project Financing

The EBRD estimates that bringing production up to early 1990s levels would cost \$15 - \$16 million. The ability of the EBRD to involve itself financially, however, is likely to be limited unless the industry is privatized.

Conclusion

This project appears viable technically but its profitability, especially in regard to marketing, has not been assessed. This project is one of the prime prospects to be considered in Turkmenistan should the GOT move to privatize key state assets.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|--|
| Organization or Company Name | EBRD |
| Contact Person | Jaap Spey |
| Title | Head of Mission |
| Address | 95, Azadi Street, Ashgabat |
| Telephone | (993 12) 35-66-17; 35-47-00 |
| Fax | (993 12) 51-22-63 |
| E-mail | spey@asb.ebrd.com |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | State Agency for Foreign Investments |
| Contact Person | Emir K. Kuliev |
| Title | Vice-Director |
| Address | 53, Azadi Street Ashgabat |
| Telephone | (993 12) 39-10-54 |
| Fax | (993 12) 35-04-16 |
| E-mail | |

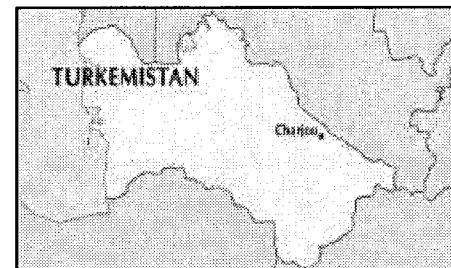
301

REPUBLIC OF TURKMENISTAN

CHARJOU CARBOMIDE PRODUCTION PLANT

Project Summary

| | |
|--------------------------|-------------------------------|
| Subsector | Industry |
| Location | Charjou |
| Project Cost | US\$ 300 Million |
| Export Potential | TBD by Investor |
| Project Type | Investment Opportunity |
| Project Executing Agency | Ministry of Energy & Industry |



Project Outline

The Ministry is looking for an investor interested in constructing a plant to produce ammonia and carbomide in Charjou, Turkmenistan. The Ministry plans to conduct tendering for a Build-Operate-Transfer contract to plan, construct, and start-up the plant and then operate it under a management contract. This project is considered to be of high priority by the GOT.

Technical Description

The project would involve construction of a complex to produce mineral fertilizers: liquid waterless ammonia with annual capacity of 333,000 tons (daily capacity of 1000 metric tons); and carbomide with annual capacity of 350,000 tons (daily capacity of 1050 metric tons).

The Ministry will undertake to supply all necessary inputs to the production process, including natural gas, as well as water and electricity. A feasibility study would be necessary to establish project cost parameters.

Project Site

Charjou, Turkmenistan.

302

Project Status/Timeline

The plant is expected to take 36 months to build, including planning, detailed engineering, procurement of raw materials and equipment, construction and start-up. Ministry authorities are hopeful that an interested investor will appear immediately.

Equipment and Services

Interested investors should have a local partner to smooth negotiations with national and local officials. Equipment sales would be open to all vendors, with selection to be made by the contractor.

U.S. Competitiveness

U.S. companies that could bring their own financing to the project would be very competitive at this point.

Project Financing

No financing has as yet been identified. The Ministry is hopeful that the contractor will supply all the necessary financing with no sovereign financial guarantee by the Government of Turkmenistan. However, the Government will provide assurances of support to the project, privileges related with a duty free regime for importation of devices, materials and equipment, and long-term contracts with fixed prices on supply of gas, electricity, water and so on. Other clauses covering such topics as release from currency surrender requirements, and conversion of national currency into hard currency, may be incorporated into the contractor's agreement.

Conclusion

This project is a priority project for the Government of Turkmenistan. The cost of the project would have to be established in a feasibility study, which should also address aspects such as product marketing and capital convertibility.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|---|
| Organization or Company Name | Ministry of Energy & Industry |
| Contact Person | Orazmurat Yagshiev |
| Title | Chief of Commercial and External-Economy Activity Management Center |
| Address | 6, Nurberdi Pomma Street, Ashgabat |
| Telephone | (993 12) 39-47-14 |
| Fax | (993 12) 39-47-14 |
| E-mail | Kuwwat@online.tm |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | State Agency for Foreign Investments |
| Contact Person | Emir K. Kuliev |
| Title | Vice-Director |
| Address | 53, Azadi Street Ashgabat |
| Telephone | (993 12) 39-10-54 |
| Fax | (993 12) 35-04-16 |
| E-mail | |

REPUBLIC OF TURKMENISTAN

TURKMENBASHI STEEL PIPE PRODUCTION PLANT

Project Summary

| | |
|--------------------------|-------------------------------|
| Subsector | Steel Pipe |
| Location | Turkmenbashi |
| Project Cost | US\$ 30 Million |
| Export Potential | TBD by Investor |
| Project Type | Investment Opportunity |
| Project Executing Agency | Ministry of Energy & Industry |



Project Outline

The GOT proposes to enter into a Build-Operate-Transfer (BOT) arrangement with a foreign sponsor to plan, construct, supply and assemble equipment, initiate operations, and collect repayment of its investment from the receipts of managing and operating a steel pipe production facility in Turkmenbashi, Turkmenistan. The estimated total cost of the investment is \$30 million.

Technical Description

A number of pipeline project proposals in the Caspian region have highlighted the cost and logistics difficulties of importing steel pipe into Turkmenistan that meets international standards. One option may be to produce steel pipe in Turkmenbashi, as anticipated under this project profile.

The proposed plant would have an annual production capacity of 82,000 tons of 500 x 1400 mm steel pipe. In addition, units to produce bitumen and polyethylene insulation would be installed. Raw materials for plant construction would be imported. Steel to be utilized as raw material in pipe production will also be imported.

The site already has a suitable building, access roads, communications and also cranes capable of lifting of 10-30 tons.

305

Project Site

Turkmenbashi, Turkmenistan

Project Status/Timeline

This is a priority project for the Government of Turkmenistan. The foreign sponsor would be expected to complete all works, equipment assembly and testing necessary to begin production within an 18-month period.

Equipment and Services

The GOT is looking to the foreign sponsor to develop a marketing plan and standards specifications for the pipe to be produced to meet that marketing plan.

U.S. Competitiveness

The project sponsor would bring in its own equipment and materials suppliers as part of the BOT package. U.S. companies contemplating sponsorship should consider linking up with a Turkmen partner.

Project Financing

The foreign sponsor would be expected to bring a financing proposal to the table.

The GOT is contemplating offering the sponsor the right to unimpeded current account convertibility when selling the steel pipe domestically.

306

Conclusion

The viability of the project would depend in large part on where and how the foreign consortia planning to build or upgrade pipelines in the Caspian region plan to procure the pipe. A feasibility study would be required, which would have to determine aspects such as product specifications and grade.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Ministry of Energy & Industry |
| Contact Person | Orazmurat Yagshiev |
| Title | Chief of Commercial and External-Economy Activity Management Center |
| Address | 6 Nurberdi Pomma Street, Ashgabat |
| Telephone | (993 12) 39-47-14 |
| Fax | (993 12) 39-47-14 |
| E-mail | kuwwat@online.tm |

REPUBLIC OF TURKMENISTAN

CROP PROTECTION & VETERINARY SERVICES

Project Summary

| | |
|--------------------------|---|
| Subsector | Agriculture |
| Location | Nationwide |
| Project Cost | US\$ 30 Million |
| Export Potential | US\$ 15 Million |
| Project Type | Development |
| Project Executing Agency | Ministry of Agriculture & Water Resources |



Project Outline

This is the first World Bank agricultural project in Turkmenistan. The \$30 million total cost is to be supported by a \$15 million World Bank loan. The project aims to support agricultural reforms by maintaining key public services, reducing losses due to pests and diseases, and supporting agricultural development.

Technical Description

The project is to be implemented by a project implementation unit (PIU) located in the Ministry of Agriculture and Water Resources. The project components are: (a) crop protection; (b) veterinary services; and (c) regulatory and quality control of animal drugs and pesticides. The project's principal components are technical assistance and training, with some procurement of animal vaccines and drugs.

The project could be followed by a \$30 - \$50 million agricultural sector restructuring project that would involve equipment purchases and the extension of support to small private farmers.

Project Site

The project will be implemented nationwide, with consulting services provided to the Ministry of Agriculture and Water Resources in Ashgabat.

Project Status/Timeline

The project is scheduled for appraisal in June, 1999 and for Board approval in August of 1999. With the Board approval date falling after the end of the Bank's fiscal year, however, delays may be expected.

Equipment and Services

International tenders to supply necessary technical assistance and training services, as well as for the purchase of animal vaccines, are likely from the Bank's portion (\$15 million) of the financing package.

U.S. Competitiveness

American companies should be competitive in responding to international tenders for technical assistance and sale of animal vaccines.

Project Financing

The project is to be financed by a World Bank loan of \$15 million, with the balance to be supplied by the GOT. All foreign currency costs are expected to be financed by the Bank loan.

Conclusion

American companies should be competitive in responding to international tenders for technical assistance and sale of animal vaccines. As the first Bank project in Turkmenistan's agricultural sector, it could be a good means of introduction for American companies that provide development assistance services in agriculture.

| |
|----------------------------|
| Key Decision Makers |
|----------------------------|

| | |
|------------------------------|---|
| Organization or Company Name | Ministry of Agriculture and Water Resources |
| Contact Person | Kurbanmurat Rozyev |
| Title | Deputy Chairman of the Cabinet of Ministers and Minister of Agriculture and Water Resources |
| Address | 17, Neutral Turkmenistan Street, Ashgabat |
| Telephone | (993 12) 35-66-87 |
| Fax | (993 12) 35-11-34 |
| E-mail | |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | The World Bank |
| Contact Person | T.W. Schillhorn van Veen |
| Title | ECSSD |
| Address | 1818 H Street. N.W. Washington, D.C. |
| Telephone | (202) 473-3057 |
| Fax | (202) 614-0696 |
| E-mail | |

REPUBLIC OF TURKMENISTAN

FARM RESTRUCTURING SUPPORT

Project Summary

| | |
|--------------------------|----------------------------------|
| Subsector | Agriculture |
| Location | Nationwide |
| Project Cost | US\$ 50 Million |
| Export Potential | US\$ 40 Million |
| Project Type | Sector Adjustment |
| Project Executing Agency | Ministry of Agriculture and Food |



Project Outline

The objectives of this project are to provide support to private agricultural producers in the form of market access, cropping and business advice, documentation of tenure rights and credit for working capital and investments. Disbursements over a five-year period of a \$40 million World Bank loan in support of the project would be conditioned on implementation of policy and sector adjustment performance measures.

Technical Description

The project's components are: (a) development of the land registration system; (b) technical assistance in the development of farm management, accounting, financial operations, water management and other technical fields; and (c) extension of medium-term credits to small- and medium-sized agribusinesses and farm families, and creation of a revolving fund for working capital and agricultural inputs.

Activities to be supported by the project may include:

- (1) documentation of land rights and land registration, land surveying, cartography and titling;
- (2) information and advisory services in agronomy, livestock management and business and financial management for leaseholders and private farmers, and improved forward and backward linkages; and
- (3) access to financial services (credit and leasing) extended to leaseholders, private farmers and other rural entrepreneurs.

Project Site

The land titling scheme would be initiated in a pilot region and then rolled out nationwide. The remainder of the project would be developed nationwide.

Project Status/Timeline

The project is currently under design by a working group under the guidance of the Cabinet of Ministers. It is expected that the Ministry of Agriculture and Water Resources, and State Daykhan Bank and its local branches will take primary responsibility for the implementation of project components. The project would be implemented over a period of five years.

Equipment and Services

Although the project is still being designed, it is anticipated that implementation will require consulting services in technical assistance, training and management of credit extension activities. The project is also likely to entail purchases of agricultural equipment and other inputs through its credit extension component.

U.S. Competitiveness

American companies should be competitive in responding to international tenders for technical assistance and sale of agricultural equipment and other inputs.

Project Financing

The project is to be financed by a World Bank loan of \$40 million, with the balance to be supplied by the GOT. All foreign currency costs are expected to be financed by the Bank loan.

Conclusion

American companies should be competitive in responding to international tenders for technical assistance and sale of agricultural equipment and other inputs. Participation in this phase could provide an entry to Turkmenistan for American agribusiness companies.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Ministry of Agriculture and Water Resources |
| Contact Person | Kurbanmurat Rozyev |
| Title | Deputy Chairman of the Cabinet of Ministers and Minister of Agriculture and Water Resources |
| Address | 17, Neutral Turkmenistan Street, Ashgabat |
| Telephone | (993 12) 35-66-87 |
| Fax | (993 12) 35-11-34 |
| E-mail | |

| | |
|------------------------------|--------------------------------------|
| Organization or Company Name | The World Bank |
| Contact Person | Gulnaz Abdukadir |
| Title | Task Manager |
| Address | 1818 H Street. N.W. Washington, D.C. |
| Telephone | (202) 473-3590 |
| Fax | (202) 477-3274 |
| E-mail | |

313





UZBEKISTAN PROJECTS

| MAP NO. | PROFILE NO. | PROJECT NAME | LOCATION |
|---------|-------------|---|---------------------------------------|
| 1. | UZ1 | Tashkent Thermal Power Plant | Tashkent |
| 2. | UZ2 | Navoi Thermal Power Plant | Navoi |
| 3. | UZ3 | Thermal Power Plants | Novo Angren, Ferghana and Mubarek |
| 4. | UZ4 | Bukhara-Turkmenistan Border Road Rehabilitation | Bukhara-Turkmenistan |
| 5. | UZ5 | Second Road Rehabilitation Project | Bukhara-Samarkand-Tashkent |
| 6. | UZ6 | Urban Transport | Bukhara, Navoi, Nukus and Samarkand |
| 7. | UZ7 | Agricultural Enterprise Restructuring | Nationwide |
| 8. | UZ8 | Health Project | Ferghana, Navoi and Syr Darya Oblasts |



REPUBLIC OF UZBEKISTAN

TASHKENT THERMAL POWER PLANT

Project Summary

| | |
|--------------------------|--|
| Subsector | Electric Power Generation |
| Location | Tashkent |
| Project Cost | US\$ 440 Million |
| Export Potential | US\$ 100 Million |
| Project Type | Power Plant Construction |
| Project Executing Agency | Ministry of Energy and Electrification |



Project Outline

The project calls for the installation of a new (13th) electric generating unit in the existing Tashkent power plant.

Technical Description

The new power plant will be a gas steam turbine unit with a capacity of 370 MW.

Project Site

The project is located in Tashkent.

Project Status/Timeline

Tenders are expected to be announced by the end of 1999 with project completion by the end of 2000.

315

Equipment and Services

Equipment to be provided includes a new 370 MW gas fired steam turbine generator including boilers, condensers, pumps and feedwater heaters.

U.S. Competitiveness

U.S. competitiveness is considered fair at best for those portions of project procurement open to non-Japanese suppliers. Under the terms of the OECF Privileged Yen Credit, 50% of the loan amount must be for Japanese-sourced providers of equipment and services. The best opportunities for American exporters probably are in the specialty equipment and specialized technical services area. These would include computerized controls and position control equipment.

Project Financing

Of the project's estimated \$230 - \$240 million cost, 85% (approximately \$200 million) will be provided by an OECF Credit. The remaining 15% (\$30 - \$40 million) will come from Uzbekistan sources. Of the approximately \$200 million OECF sourced amount, at least 50% must be spent on Japanese equipment and services. The remaining \$100 million may be spent on equipment and services from other countries.

Conclusion

Given that the OECF Credit prescribes that at least 50% of the credit must be spent on Japanese-sourced equipment and services, it can be expected that the Japanese firms will be charged with responsibility for plant design and construction, and in turn tend to favor Japanese-sourced equipment for the entire project. American providers of specialty equipment and technical services may have some limited opportunity for exports related to selected portions of this project.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Uzbekistan Ministry of Energy and Electrification |
| Contact Person | Shukhrat Abdullaev |
| Title | Deputy Minister |
| Address | 6 Khorezm Street, Tashkent |
| Telephone | (998 71) 136-6876 |
| Fax | (998 71) 136-2700 |
| E-mail | NA |

REPUBLIC OF UZBEKISTAN

NAVOI THERMAL POWER PLANT

| Project Summary | |
|--------------------------|--|
| Subsector | Electric Power Generation |
| Location | Tashkent |
| Project Cost | US\$ 180 Million |
| Export Potential | US\$ 76 Million |
| Project Type | Power Plant Construction |
| Project Executing Agency | Ministry of Energy and Electrification |



Project Outline

The project calls for replacing the existing Navoi Power Plant's first unit with two new gas steam turbines.

Technical Description

New equipment to be installed includes two new gas steam turbines with a capacity of 120 to 150 MW each, for a total capacity of 240 MW to 300 MW.

Project Site

The project is located at the existing Navoi Power Station.

Project Status/Timeline

The project's feasibility study is now under preparation by the Japanese with their completion report anticipated in July, 1999. Current plans are for project completion in 2002.

318

Equipment and Services

Equipment to be provided includes two gas steam turbines, with capacities of 120 MW to 150 MW each, and the ancillary equipment as required to support operation.

U.S. Competitiveness

A Japanese company is completing a feasibility study, expected to be ready in June 1999. Assuming that an OECF Privileged Yen Credit is made available to support the project, U. S. competitiveness is considered fair at best for those portions of procurement available to non-Japanese suppliers. The best opportunities for American exporters probably are in speciality equipment items and technical services.

Project Financing

Based on discussions with officials from the Ministry of Energy and Electricity, it is anticipated that the project could be financed by an OECF Privileged Yen Credit. Under such a credit, 85% of the estimated \$180 million project cost would come from the Japanese Credit (\$153 million) with the remaining amount coming from Uzbekistan sources. Of the approximately \$153 million OECF-sourced amount, at least 50% must be spent on Japanese equipment and services. The remaining \$76 million may be spent on equipment and services from other countries.

Conclusion

Given that the OECF Privileged Yen Credit prescribes that at least 50% of the credit must be spent on Japanese-sourced equipment and services, it can be expected that Japanese firms will be charged with responsibility for plant design and construction, and in turn tend to favor Japanese-sourced equipment for the entire project. American providers of specialty equipment and technical services may have some limited opportunity for exports related to selected portions of this project.

Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Uzbekistan Ministry of Energy and Electrification |
| Contact Person | Shukhrat Abdullaev |
| Title | Deputy Minister |
| Address | 6 Khorezm Street, Tashkent |
| Telephone | (998 71) 136-6876 |
| Fax | (998 71) 136-2700 |
| E-mail | NA |

320

REPUBLIC OF UZBEKISTAN

THERMAL POWER PLANTS

Project Summary

| | |
|--------------------------|--|
| Subsector | Electric Power Generation |
| Location | Novo Angren, Ferghana Valley and Mubarek |
| Project Cost | US\$ 552 Million |
| Export Potential | US\$ 150 Million |
| Project Type | Turbine Installation |
| Project Executing Agency | Ministry of Energy and Electrification |



Project Outline

This project deals with rehabilitation and construction of three major power plants in Uzbekistan. Project 1 calls for the installation of the 8th (last) gas-fired steam turbine unit in the existing Novo-Angren Power plant; Project 2 deals with the conversion of the old Ferghana oil-fired thermal power station to gas-fired steam turbine generators through total plant replacement; and Project 3 is the construction of a new combined cycle steam power plant in Mubarek (SW Uzbekistan). No international financing has been established for any of these projects yet and vendors will be expected to come up with their own financing schemes.

Technical Description

The specifications for each of the three plants are as follows:

Project 1: (Project Cost \$288 million)

The plant at the Novo-Angren Power plant will be a gas-fired boiler with a steam turbine generator unit with a capacity of 220-240 MW.

Project 2: (Project Cost \$144 million)

Current plans call for the complete removal of the existing Ferghana power station and constructing a new plant on or near the same site with two 60 MW steam turbines with boilers.

Project 3: (Project Cost \$120 million)

Preliminary plans call for the Mubarek power plant to have a 100 MW generating capacity. This will probably be a combined-cycle steam turbine power plant given the high costs of installing steam turbines.

Project Site

The projects are located in Novo Angren, Ferghana and Mubarek.

Project Status/Timeline

Project 1

Tenders are expected to be announced by the end of 1999 with project completion by the end of 2000.

Projects 2 & 3

As these projects are in their early development stages and the required financial resources are not yet identified, the estimated project time line is for project completion two to three years after financial commitments have been arranged.

Equipment and Services

Common equipment to be procured for all three projects will include:

- Boilers, Gas Fired
- Steam Turbines
- Generators, 50 Hz
- Condensers, Water Cooled
- Cooling Towers
- Circulating Water Pumps
- Feedwater Heaters
- Condensate Pumps
- Instrumentation
- Computerized Control Systems
- Emission Control Equipment
- Water Pollution Control Equipment
- Boiler Feedwater Treatment Systems
- Electrical Equipment including Station Transformer, Switchyard and Switchgear

U.S. Competitiveness

U.S. competitiveness is this project will depend on the source of financing. If project financing can be identified that does not require specific country sourcing, American competitiveness will be good. U.S. firms should be especially competitive in the supply of computerized control systems; instrumentations; emissions control equipment (knox control); and catalytic/non-catalytic pollution reduction equipment.

Project Financing

Vendors are asked to come up with their own financing proposals.

Conclusion

Given prevailing economic trends in Uzbekistan, it is anticipated that these power plant projects will be postponed until such time as foreign financing with terms reasonable to all sides can be identified and committed.

Key Decision Makers

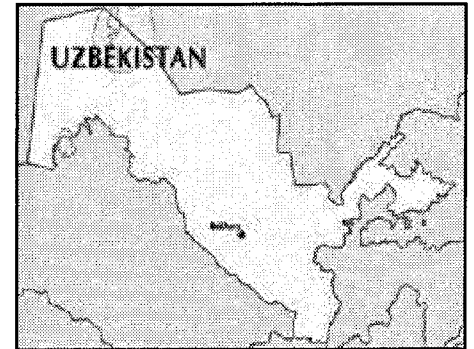
| | |
|------------------------------|---|
| Organization or Company Name | Uzbekistan Ministry of Energy and Electrification |
| Contact Person | Shukhrat Abdullaev |
| Title | Deputy Minister |
| Address | 6 Khorezm Street, Tashkent |
| Telephone | (998) - 71- 136-6876 |
| Fax | (998) - 71- 136-2700 |
| E-mail | NA |

REPUBLIC OF UZBEKISTAN

BUKHARA - TURKMENISTAN BORDER ROAD REHABILITATION

Project Summary

| | |
|--------------------------|---|
| Subsector | Highways |
| Location | Bukhara - Turkmenistan Border |
| Project Cost | US\$ 136 Million |
| Export Potential | US\$ 50 Million |
| Project Type | Highway Rehabilitation and Maintenance |
| Project Executing Agency | The Road Board of Uzbekistan |



Project Outline

The project will include the following:

- 1) Rehabilitate the existing road between Bukhara and the Turkmenistan Border to a 4 lane divided highway standard.
- 2) Support policy reforms and provide institutional strengthening to those Uzbekistan agencies involved with the road sector.
- 3) Improve road maintenance and safety systems along the Samarkand - Bukhara - Turkmenistan highway corridor.

Technical Description

Specific project components will include:

- 1) Road rehabilitation/reconstruction of 94 Km. of four-lane roadway.
- 2) Provision of advisory technical assistance in support of institutional reforms related to the highway sector.
- 3) Provision of engineering consulting services to include detailed design and construction supervision, road maintenance assistance and benefit monitoring and evaluation.

324

Project Site

Project activities will take place along the existing Samarkand - Bukhara - Turkmenistan highway corridor.

Project Status/Timeline

Consulting services and civil works are likely to begin in mid 1999. The anticipated project duration is three years.

Equipment and Services

Equipment: Highway Construction Equipment
Highway Maintenance Equipment and
Traffic Signal and Control Devices

Engineering Consulting Services: 234 person months
o/w: 114 person months for international
120 person months for domestic

U.S. Competitiveness

U.S. competitiveness is regarded as good for the sale of highway construction and maintenance equipment as well as for traffic signals and control devices. Prospects for engineering consulting services are regarded as fair to good.

Project Financing

The project will be supported by a \$50 million loan from the Asian Development Bank (ADB) to cover goods and services procured through international competitive bidding from ADB member countries. Additional funds in the amount of \$52.5 million will be made available by the Government of Uzbekistan to cover the local costs associated with the project. It is assumed that beneficiaries (the GOU) will contribute \$33.5 million to local costs associated with the project, and \$50 million will come from "other" sources.

Conclusion

Asian Development Bank (ADB) highway improvement projects in Uzbekistan should offer a modest to good opportunity to American equipment manufacturers and engineering consultants. Interested U.S. companies are advised to partner with an Asian company.

Key Decision Makers

| | |
|------------------------------|-------------------------------------|
| Organization or Company Name | The Road Board of Uzbekistan |
| Contact Person | Akram Azlavovich |
| Title | |
| Address | 68-A Pushkin Street, 70000 Tashkent |
| Telephone | (998) - 371-136-0853 |
| Fax | (998) - 371-268-2526 |
| E-mail | NA |

| | |
|------------------------------|--|
| Organization or Company Name | Asian Development Bank |
| Contact Person | Sangpa Tamang |
| Title | Project Officer - Transport and Communications Division East |
| Address | P.O. Box 789,0980 Manila, Philippines |
| Telephone | (63)-2- 632-6918 / (63) - 2-632-4444 |
| Fax | (63) - 2-636-2466 |
| E-mail | Stamang@mail.asaindevbank.org |

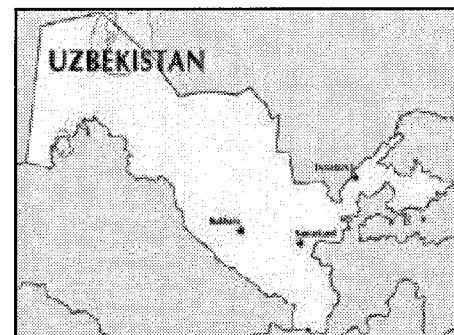
326

REPUBLIC OF UZBEKISTAN

SECOND ROAD REHABILITATION PROJECT

Project Summary

| | |
|--------------------------|---|
| Subsector | Highways |
| Location | Bukhara-Samarkand - Tashkent Corridor |
| Project Cost | US\$ 70 Million |
| Export Potential | US\$ 60 Million |
| Project Type | Highway Rehabilitation and Maintenance |
| Project Executing Agency | The Road Board of Uzbekistan |



Project Outline

Pending final project development by the ADB and the Road Board of Uzbekistan it is expected that the project will include the following:

- 1) Rehabilitate the existing road along the Bukhara to Tashkent highway corridor.
- 2) Support policy reforms and provide institutional strengthening to those Uzbekistan agencies involved with the road sector.
- 3) Improve road maintenance and safety practices

Technical Description

Specific project components will include:

- 1) Road rehabilitation/reconstruction of approximately 120 Km. of existing road.
- 2) Provision of advisory technical assistance in support of institutional reforms related to the highway sector.
- 3) Provision of engineering consulting services to include detailed design and construction supervision, road maintenance assistance and benefit monitoring and evaluation.

327

Project Site

Project activities will take place along the existing Bukhara - Samarkand - Tashkent highway corridor.

Project Status/Timeline

Consulting services and civil works are likely to begin in 2001. The anticipated project duration is three years.

Equipment and Services

| Equipment: | <u>Amount</u> |
|------------------------------------|---------------|
| Highway Construction Equipment | \$35 Million |
| Highway Maintenance Equipment | \$20 Million |
| Traffic Signal and Control Devices | \$2-3 Million |
| Engineering Consulting Services | \$2-3 Million |

U.S. Competitiveness

U.S. competitiveness is regarded as good for the sale of highway construction and maintenance equipment as well as for traffic signals and control devices. Prospects for engineering consulting services are regarded as fair to good.

Project Financing

The project will be supported by a \$60 million loan from the Asian Development Bank (ADB) to cover goods and services procured through international competitive bidding from ADB member countries. Additional money will be made available by the Government of Uzbekistan to cover the local costs associated with the project.

Conclusion

Asian Development Bank (ADB) highway improvement projects in Uzbekistan should offer a modest to good opportunity to American equipment manufacturers and engineering consultants. Interested U.S. companies are advised to partner with an Asian company.

Key Decision Makers

| | |
|------------------------------|-------------------------------------|
| Organization or Company Name | The Road Board of Uzbekistan |
| Contact Person | Akram Azlavovich |
| Title | |
| Address | 68-A Pushkin Street, 70000 Tashkent |
| Telephone | (998) - 371-136-0853 |
| Fax | (998) - 371-268-2526 |
| E-mail | |

| | |
|------------------------------|--|
| Organization or Company Name | Asian Development Bank |
| Contact Person | Sangpa Tamang |
| Title | Project Officer - Transport and Communications Division East |
| Address | P.O. Box 789,0980 Manila, Philippines |
| Telephone | (63)-2- 632-6918 / (63) - 2-632-4444 |
| Fax | (63) - 2-636-2466 |
| E-mail | Stamang@mail.asaindevbank.org |

REPUBLIC OF UZBEKISTAN

URBAN TRANSPORT

| Project Summary | |
|--------------------------|---|
| Subsector | Transport |
| Location | Bukhara, Navoi, Nukus and Samarkand |
| Project Cost | US \$ 75 Million |
| Export Potential | US \$ 35 Million |
| Project Type | Urban Passenger Transport |
| Project Executing Agency | Uzbek State Stock Corp. of Automotive Transport (UZAVTOTRANS) |



Project Outline

This is the first World Bank-financed urban transport project in Uzbekistan. The main objective of the project is to increase the quantity and improve the quality of public transport services in a sustainable manner in five medium-sized Uzbek cities. The \$75 million total cost for the project is to be supported by a \$60 million World Bank loan. Most of the vehicles and equipment procured under the project would come from abroad.

Technical Description

The project will be implemented by a Project Management Unit (PMU) within the Uzbek State Stock Corporation of Automotive Transport (UZAVTOTRANS) which will have overall responsibility for implementing the project and coordinating the activities in the participating cities. It will facilitate the development of sustainable urban transport operations in each of the participating cities. An important objective will be to make the sector more commercial and competitive based on the transport operators' financial autonomy, including the ability to generate internally adequate funds for vehicle maintenance and replacement. Appropriate accounting and management information systems will be developed to support commercial activities by the joint-stock companies. The financial position of the Urban Transport companies will be strengthened to ensure full cost recovery.

330

Specific project components will include:

- Renewal and rehabilitation of the vehicle fleets
- Strengthening the policy environment and improving efficiency of public sector management in the urban transport sub-sector
- Enhancing private-sector management in the urban transport sub-sector
- Enhancing private sector participation in service provision
- Improving operations and management of existing bus enterprises
- Improving cost recovery of State joint-stock urban bus enterprises

Project Site

This project deals with improvement in urban transport in the five Uzbek cities of Almalyk, Bukhara, Navvoy, Nukus and Samarkand.

Project Status/Timeline

The specific project components will be finalized after the World Bank concludes the on-going preparation studies. The Bank expects to open this project for procurement in June/July 1999.

Equipment and Services

The following equipment and services will be procured using the \$60 million World Bank loan:

Equipment

Diesel-powered Buses
Rehabilitation of Existing Vehicles
Emissions-control equipment
Workshop tools and equipment
Bus Spare parts

Consulting Services

Operational improvement within UZAVTOTRANS
Technical Assistance and Training
Supervision and Monitoring

U.S. Competitiveness

U.S. competitiveness is regarded as modest to good for the consulting services. It is expected that most of the vehicle procurement will be done through international procurement, where U.S. companies will have to compete against Korean, Japanese and German firms. The Korean carmaker Daewoo already has a plant in Uzbekistan and U.S. companies can expect stiff competition from them. U.S. firms should be especially competitive in supplying emissions control equipment.

Project Financing

The project will be supported by a \$60 million loan from the World Bank which is 80% of the project's total cost. An additional \$15 million will be made available by the Government of Uzbekistan to cover the local costs associated with the project.

Conclusion

Since most of the vehicles and equipment procured under this project are expected to come from outside Uzbekistan, U.S. companies should be able to compete equally with other companies in the international tendering process. They also have a modest to good chance of getting some of the consulting services to make process improvements within UZAVTOTRANS.

Key Decision Makers

| | |
|------------------------------|--|
| Organization or Company Name | The World Bank |
| Contact Person | Jean-Charles Crochet |
| Title | Task Manager |
| Address | ECSIN, 1818 H. Street, NW, Washington, D.C. 20433 |
| Telephone | 202-473 1159 |
| Fax | 202-522 1500 |
| E-mail | Jccrochet@worldbank.org |

Profile No. UZ-6

| | |
|------------------------------|---|
| Organization or Company Name | Uzbek State Stock Corporation of Automotive Transport (PMU) |
| Contact Person | Kahramon Sidiknazarov |
| Title | Chairman |
| Address | 6 Amir Temur St., pass. 1, Tashkent 700000, Uzbekistan |
| Telephone | |
| Fax | |
| E-mail | |

REPUBLIC OF UZBEKISTAN

AGRICULTURAL ENTERPRISE RESTRUCTURING

Project Summary

| | |
|--------------------------|-------------------------------|
| Subsector | Agriculture |
| Location | Nationwide |
| Project Cost | US\$ 41 Million |
| Export Potential | US\$ 20 Million |
| Project Type | Privatization & Restructuring |
| Project Executing Agency | Cabinet of Ministers |



Project Outline

The Agricultural Enterprise Restructuring Program (AERP) aims to increase the profitability and sustainability of Uzbek agriculture through the privatization and restructuring of farming and associated agribusiness activities. The \$41 million cost of Phase I is to be supported by a \$30 million World Bank loan. Phase I will: (a) help create the enabling conditions for farm privatization and restructuring; and (b) initiate the process of farm privatization by providing the necessary support to farmers who choose to participate in the process.

Technical Description

The proposed project would cover the first phase of the AERP. Extending over three years, it would focus on creating the enabling environment for agricultural enterprise restructuring. Support would be provided to help enact a new Land Law, resolve land tenure issues, systematize land registration and initiate its implementation in pilot sites, and create rural business advisory services.

In addition, the project would provide technical and financial support to qualifying private farm and agribusiness units at selected sites, to demonstrate the benefits of participating in the privatization process. A business start-up facility would be established to finance eligible expenditures by qualifying farms. This would be managed by a private company or NGO in cooperation with a commercial bank. Allocation of funds for strengthening of public infrastructure deemed essential for privatized agricultural units would be determined by a panel of local representatives from the selected Tumans, subject to pre-established qualifying criteria.

Project Site

The project would be implemented nationwide, with demonstration post-restructuring activities to occur in six selected Tumans, to be determined.

Project Status/Timeline

The World Bank's first Project Identification Document for this project was prepared in January 1997. Negotiations were tentatively scheduled to resolve outstanding issues in the first quarter of 1999.

Equipment and Services

Services to be provided could include technical assistance and training concerning the areas of focus for policy and institutional reform; as well as establishing and running the business start-up facility. At this stage it is not known what proportion of project funds would be devoted to the construction, upgrade or rehabilitation of public infrastructure or what types of infrastructure would be financed, but there could be opportunities here as well.

U.S. Competitiveness

As a World Bank-financed project, U.S. competitiveness for those portions of the project opened for international procurement would be quite good. It is worth noting in this regard that TDA is financing a feasibility study for the application of western-standard international procurement methods and procedures by Uzbekistan's Ministry of Agriculture. Opportunities for international procurement are in consulting and limited equipment sales of about \$20 million.

Project Financing

The project will be financed by a \$30 million World Bank loan, with the balance to be provided by the Government of Uzbekistan.

Conclusion

This project, if negotiated successfully between Uzbek and World Bank authorities, could offer opportunities for American companies to get involved Uzbekistan's agribusiness sector. Unfortunately, the opportunities for international procurement look like being restricted to consulting and limited equipment sales.

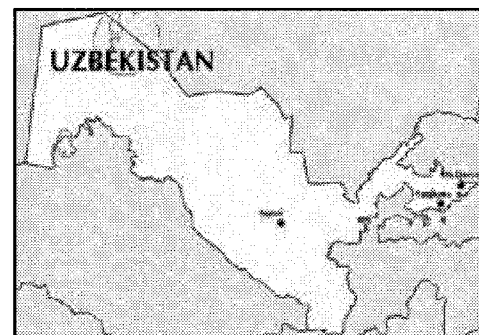
Key Decision Makers

| | |
|------------------------------|-------------------------------|
| Organization or Company Name | Cabinet of Ministers |
| Contact Person | Inoiat Nurov |
| Title | Director General |
| Address | 29, Suleymanova St., Tashkent |
| Telephone | 7-3712-391-887 |
| Fax | 7-3712-394-469 |
| E-mail | |

REPUBLIC OF UZBEKISTAN

HEALTH PROJECT

| Project Summary | |
|--------------------------|---|
| Subsector | Health, Nutrition and Population |
| Location | Ferghana, Navoi and Syr Darya Oblasts |
| Project Cost | US\$ 70 Million |
| Export Potential | US\$ 30 Million |
| Project Type | Health Care |
| Project Executing Agency | Project Implementation Unit, Ministry of Health |



Project Outline

The main project goal is to help improve the quality and the efficiency of health care service delivery in the rural sector. The World Bank has approved a \$30 million loan that will be matched by a \$40 million contribution by the Government of Uzbekistan. This is the World Bank's first lending project in the health sector in Uzbekistan.

Technical Description

The project is divided into four major components:

- 1) **Strengthening Primary Health Care Services.** There will be international procurement to accomplish:
 - rehabilitation and upgrade of existing rural health facilities,
 - basic diagnostic, therapeutic and laboratory equipment for all rural medical centers developed under the four year program,
 - medical supplies and lab reagents,
 - laboratory diagnostic equipment,
 - twenty vehicles,
 - packet radio communication system,
 - training,
 - foreign and local technical assistance for health promotion, and
 - workshops and technical assistance for management and quality assurance programs and to enhance capacity for construction supervision.
- 2) **Training of General Practitioners and Universal Nurses.**

337

- 3) Strengthening of Finance and Management.
- 4) Project Management.

Project Site

This project will be executed by the Ministry of Health and local health authorities in Syr Darya, Navoi and Ferghana Oblasts.

Project Status/Timeline

The World Bank approved a \$30 million Health Project Loan in September 1998. The project is expected to close in December 2002. Work on the training of General Practitioners and Universal Nurses and Strengthening of Finance and Management Systems has just begun. Procurement of equipment is expected to begin soon and will carry on for the life of the project.

Equipment and Services

To support and strengthen the implementation of Government's plans to improve health services in the rural areas, the project will procure the following equipment and services at a total cost of \$60 million over a 4-year period:

| <u>Equipment</u> | <u>Amount</u> |
|---|-----------------------|
| • construction and rehabilitation of rural medical centers | \$27.6 million |
| • computer equipment | \$ 4.0 million |
| • office furniture | \$ 2.5 million |
| • basic diagnostic, therapeutic, laboratory equipment and packet radio communication system | \$16.3 million |
| • medical supplies and lab reagents | \$ 1.7 million |
| • twenty medical vehicles | \$ 0.4 million |
| | |
| <u>Services</u> | |
| • training | \$ 2.1 million |
| • technical assistance for health promotion, management and quality assurance programs workshops for management and quality assurance programs and to enhance capacity for construction supervision | \$ 5.4 million |
| TOTAL | \$60.0 million |

338

U.S. Competitiveness

U.S. competitiveness is regarded as good for the sale of specialized medical equipment, supplies and reagents; computer equipment; and radio communication equipment. Most of the construction, rehabilitation work will probably be procured locally. U.S. firms should expect competition from German firms on the procurement of medical equipment. U.S. firms should also have an edge in winning some of the training and technical assistance work. A General Procurement Notice (GPN) for equipment will be published in the UN publication "Development Business" every September during the life of project.

Project Financing

The total project cost is estimated to be \$70 million. The project will be supported by a \$30 million loan from the World Bank. \$18.6 million of the World Bank loan will be used for procurement of equipment and services; \$5.5 million will be used for training of General Practitioners and Universal Nurses; \$2.8 million will be used for strengthening the Finance and Management Units; and \$1.1 million will be used for Project Management. Additional funds in the amount of \$40 million will be made available by the Government of Uzbekistan to cover the local costs associated with the project.

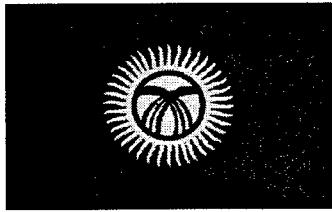
Conclusion

This project is a good opportunity for U.S. medical equipment manufacturers and pharmaceutical companies to enter the Uzbek market. This project is the first part of the Government's attempt over the next ten years at diversification of revenues flowing into the health sector, creation of health insurance, and expanded privatization of providers and distribution networks. Interested U.S. firms should utilize the World Bank's financial guarantee for payment of services and international competitive bidding process to enter and explore the health sector in Uzbekistan for future potential.

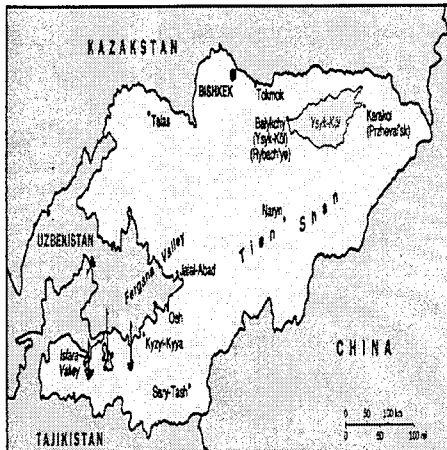
Key Decision Makers

| | |
|------------------------------|---|
| Organization or Company Name | Ministry of Health, Uzbekistan |
| Contact Person | Dr. Fozil Khasanov |
| Title | Director, Central Project Implementation Bureau |
| Address | 51, Parkentskaia str., Tashkent, 700007 |
| Telephone | (998 712) 68 08 19 |
| Fax | (998 712) 67 73 47 |
| E-mail | hphealth@bcc.com.uz |

| | |
|------------------------------|---|
| Organization or Company Name | The World Bank |
| Contact Person | John C. Langenbrunner, ECSHD |
| Title | Task Manager |
| Address | 1818 H Street, NW, Washington, D.C 20433 |
| Telephone | 202-473 3270 |
| Fax | 202-477 0574/3387/0711 |
| E-mail | Jlangenbrunner@worldbank.org |



Kyrgyzstan Country Overview



BASIC FACTS:

Capital: Bishkek
Area: 199,900 square kilometers
Population: 4.7 million
Currency: Kyrgyz som
Exchange Rate: \$1 = 31.23 som
GNP: \$ 2 billion (1997)
GDP Growth: 7.1% (1996); 6.1% (1997);
4.5% (1998-02)
GNP per capita: \$440 (1997)
Inflation: 26.3% (1997)

EXECUTIVE SUMMARY

Kyrgyzstan is a small country emerging from decades of Soviet domination. Since independence, the country has begun a major transition toward a democratic political system and a market economy. The country is ranked as a strong reformer by international financial institutions. Significant achievements include lowering the inflation rate, successfully completing a mass privatization program, and establishing a strong currency that is freely convertible with no controls on capital flows.

Despite these achievements, the transition to a market economy is only partially complete. Property rights and the legal system are still weak. International accounting standards need to be introduced. International donors, including the U.S. Agency for International Development (USAID) are supporting programs to strengthen these areas. The IMF has a program in place supporting macroeconomic stabilization.

Kyrgyzstan remains very poor and most major imports are financed by international donors. Recently approved projects are in the areas of telecommunications, power system rehabilitation, agricultural credit, and road construction. Kyrgyzstan's major imports are fuel, vehicles, and machinery and equipment. Major exports are wool, cotton, mercury, electricity, and meat. Most major foreign investment projects have been in gold mining. In 1997, Kyrgyzstan began to export gold. Kyrgyzstan has eliminated export tariffs and has a low, uniform tariff of 10 percent on most goods.

ECONOMIC OUTLOOK

The total collapse of the Soviet era economy in Kyrgyzstan helped to consolidate a political consensus which was strongly committed to reforming the economy along market-oriented lines. In recent years, the reform policies began to bear fruit as inflation was brought down, the currency stabilized, and economic growth resumed. The mild economic recovery was led by light manufacturing and investment in gold mining. This recovery is threatened by the collapse of the Russian Federation's economy. Kyrgyzstan's economy may not grow in 1999.

The Government has successfully completed a mass privatization program that sold off many industrial and trade enterprises. Former state and collective farms have also been privatized. Under the privatization plan approved by the Council of Ministers, Kyrgyzstan is beginning to privatize sectoral enterprises, including mining, aviation, energy, telecommunications, agricultural enterprises, and publishing.

Government activity is focused on improving economic policies and institutions to promote the growth of the private sector. A new simplified tax code went into effect on July 1, 1996. Other important elements include enacting legal reform, adopting international accounting standards, strengthening property rights and property registration, developing the capital market, improving banking supervision, improving corporate governance, improving access to market information, and instituting an open trade and investment regime. The efforts enabled Kyrgyzstan to join the World Trade Organization in December 1998.

BUSINESS AND INVESTMENT CLIMATE

In general, the Government of Kyrgyzstan is very open to all types of foreign investment. Some types of activity, particularly those involving the exploitation of natural resources, require a Kyrgyz partner and in some cases majority ownership by Kyrgyz entities. Ownership of land is evolving but outright ownership is currently illegal. Forty-nine or ninety-nine year leases are used instead. If direct ownership becomes legal, restrictions on the ownership of agricultural land by foreigners is likely.

In general, the government does not screen foreign investors. In some cases, the government itself is the local partner or owner of the local partner, in which case, the Government will have a key role in choosing foreign partners. The privatization program does not discriminate against foreign investors; in some cases, it specifically seeks to attract them. Because privatization coupons are traded, in theory, foreign entities could bid in the initial coupon auction or in later cash auctions or both.

POLITICAL CLIMATE

Kyrgyzstan has an elected president who serves 5-year terms and may serve no more than two terms. The members of the parliament also serve 5-year terms. The current president, Askar Akayev, was elected to a second term in December 1995. The office of the presidency is very powerful in that it controls all executive and judicial branch

appointments, mostly without parliamentary oversight. There has been an increasing tendency for the presidential apparatus to take over decision making authority from line ministries, further centralizing decision making power. The next presidential elections will be in 2000.

The parliament is a two house chamber of elected officials whose main task is to draft and approve legislation and to ratify treaties. The current parliament was seated in April 1995 and is working productively on a wide variety of draft legislation. The next parliamentary elections are scheduled for February 2000.

Political parties play only a minor role in Kyrgyz politics. The president is not a member of a party, and the majority of parliamentarians are unaffiliated. There are more than a dozen small parties, no one of which plays a decisive role. The largest party is the remnant of the former Communist Party. Its candidate received about 26 percent of the vote in the December 1995 presidential elections.

In general, Kyrgyzstan is politically stable with a good record on human rights. The country has taken important steps toward achieving democracy, including multi-candidate elections for the presidency and parliamentary seats.

The United States and Kyrgyzstan have established good bilateral relations; in fact, the United States was the first country to open an embassy in Kyrgyzstan. The country's commitment to democracy and economic reform have garnered strong support from the United States.

SOURCES OF FINANCING

The banking system is private and is supervised by an independent Central Bank. The banking system, which is very weak and severely undercapitalized, has 14 operating banks. Only the former state banks have anything approaching nationwide coverage. Several small, new private banks are well run and are in good financial positions, but their activities are confined mainly to Bishkek. Real interest rates remain high, and long-term credit is unavailable. Most banks make a profit mainly from foreign exchange operations.

There are no foreign exchange controls for either trade or investment. Currencies are freely traded at market prices by several hundred licensed foreign exchange vendors. Short-term finance for trade is available at high interest rates. Most foreign entities do not seek credit in Kyrgyzstan because of its high cost. Export financing is difficult to obtain. Most imports are paid for by cash or cash transfer. Letters of credit are not commonly used. Nearly everything is done on a cash basis in the private sector. The U.S. Export-Import Bank does not finance exports to Kyrgyzstan.

There are numerous sources of project financing. The Overseas Private Investment Corporation (OPIC) will finance investments in Kyrgyzstan. The Central Asian American Enterprise Fund will finance projects through both loans and equity and is very interested in co-financing with U.S. companies. The European Investment Bank finances private sector projects in Kyrgyzstan by member countries. The EBRD also provides project financing in Kyrgyzstan and U.S. is a member of EBRD. The Asian Development Bank and the World Bank/IFC finance projects in Kyrgyzstan, including

public sector projects in agriculture, transport, energy, telecommunications, and education.

SECTORAL OVERVIEW

INDUSTRY

The Government will support new technologies including production of basalt fibers, synthetic diamonds, constant magnets, nitrite ceramics, transformers, etc. The radio-electronic industry as well as silicon production in Kyrgyzstan will be a priority direction of development. There is a plan to implement two gold mining projects - "Jeruy" and "Taldy-Bulak". Moreover, a program of development of the coal industry until the year 2005 as well as the program of geological survey for oil and gas for a period of 1998-2001 has been drafted.

As far as the food processing industry is concerned, the implementation of the state program "Kant" (sugar) is envisaged. In the framework of this program, the reconstruction of the "Kaindy-Kant" and "Koshoy" joint-stock companies will be allowing full carried out processing of sugar beet. The production of grain alcohol and alcohol-based medicines will be implemented at the "Bakay" state joint-stock company. The Government also has a project to construct a plant for manufacturing packing materials in Kyrgyzstan.

Because light industry is based on the use of domestic raw materials, textile and knitting enterprises should be upgraded using financial and organizational measures. The Government intends to attract foreign investors through selling blocks of state shares of the following enterprises: "Tekstilshchik", "Mata", "Ak-bula", and "Vlksm" via international tenders. The production of terry cloth products, furniture, tapestry, tie linen with an annual volume of 1.26 million square meters. Will be organized at the "Jyldyz" joint-stock company together with a German partner. All enterprises specializing in wool processing will be included in the program "sheep raising" and will enter the association of sheep farmers of Kyrgyzstan.

The following programs are to be implemented in machinery building industry:

- transformer production at the "Oremi" joint-stock company;
- output of electric bulbs will be increased to 3.1 million pieces at the Mayli-suu plant;
- production of equipment for the small hydro electric plants will be started on the basis of 8 Kyrgyz enterprises under the Ministry of Foreign Trade and Industry;
- development projects will be started at the Tash-Kumyr plant and the Orlovka chemical-metallurgical combine;
- development of lignite deposit "Kara-Keche". An international tender will be held to organize production of tile, coal briquettes, liquid fuel, methane, organic acid,

etc. The Bishkek heating and power plant will be reconstructed to use Kara-Keche lignite.

- construction of the "Balykchi - Kara-Keche" rail road (185 km long) will continue.

Regarding the petroleum industry, the Jajal-Abad oil refinery plant will work at its full capacity thanks to an increased supply of Russian raw oil in the amount of 400,000 tons and a survey of new oil and gas deposits.

In the construction materials industry, cement packing and plastic pipes production will be organized with participation of foreign investors. Owing to a Czech grant, a new cement mill will be constructed. In order to improve glass production, the "Aynek" state joint-stock company will be reconstructed.

The total volume of import substitution is expected to be US\$35.9 million, including US\$20.3 million in the food industry, US\$1.3 million in machinery production, and US\$6.3 million in the radio electronic and electromechanical industries.

TRANSPORT AND COMMUNICATIONS

In the framework of the program of state investments, the financing of transport and communications projects totaling of 2.9 billion Kyrgyz Som will be continued along with efforts to attract foreign investors. The first phase of the reconstruction of the Bishkek-Osh highway should be completed by the end of 1999. This phase includes rehabilitation of 137 km of the road. This year, the implementation of the second phase of the project worth US\$109 million will be started.

An agreement with Uzbekistan on reconstruction of the Osh-Irkeshtam highway was signed. In 1999, the Government plans to have the Islamic bank of development fund US\$10 million for the construction of 49 km of the Jalal-Abad-Osh highway bypassing Uzbekistan territory. There is a plan to complete the reconstruction of the Manas airport by the end of 1999, and to start its full scope of operations in 2000.

The program of repair and operation of the municipal roads will be developed paid by the road fund of the republic. There is an intention to give roads into a long term rent or to private ownership.

In 1999, an international tender to sell a portion of a state block of shares of the "Kyrgyztelekom" joint-stock company will be held. In cooperation with the Kuwait fund of economic development, the project of telecommunications development of Osh city will be implemented (cost of the project is US\$8.7 million). There is a project of the Chui Oblast telecommunications modernization using a Korean credit, totaling US\$12 million.

HYDRO-POWER SECTOR

According to Kyrgyz experts, this sector can produce 142 billion kWh and generate revenues of US\$640 million from electric power exports. Unfortunately, during the last two years, electric power production decreased by 2 billion kWh and the power losses reached 40 percent. As of January 1, 1999, for the first time this branch of energy sector was operating at a loss.

In order to improve this situation, the Government will implement the following:

- the restructuring the "Kyrgyzenergo" joint-stock company and its subsequent privatization in accordance with the program approved by the Kyrgyz parliament;
- decreasing the indebtedness of Kyrgyzenergo's customers for the power consumed to no more than 45 days for the state budgeted organizations and to 90 days for the rest of their customers;
- restructuring rural consumers' indebtedness impossible to recover;
- strengthening the administrative responsibility of the state budgeted organizations for the use of electric power above set limits;
- reconsideration of tariffs for electric and heating power for 1999;
- decreasing the losses of power to 28 percent.

There are plans to reconstruct the Bishkek heating and power plant and the heating network; to construct and reconstruct infrastructure for electric power supply in the Talas, the Osh, and the Naryn Oblasts; to construct several high voltage lines including one for electric power export to China.

The work specified under an interstate agreement with Kazakhstan and Uzbekistan joint use of hydro-power resources Naryn-Syrdarya reservoirs will continue. The Government will also conclude agreements with Kazakhstan and Uzbekistan on electric power export.

AGRICULTURE

Thanks to land reform, 2.5 million rural residents were allotted land. The main target of the land reform was to increase the efficiency of soil usage. The focus will be on production of agricultural goods and food processing development. Recently, the Government has prepared the following laws: "Land Code", "On Farmership", "On Cooperatives", and "On Mortgage". Since industrial investments do not give fast payback, the hopes of the Government lie with agricultural production and in 1999 it expects 10 percent growth in this sector.

The following measures are intended to support growth in the agricultural section:

- Purchasing of 4,000 tons of high quality seeds worth Kyrgyz som 30 million at the expense of the "EC-Kyrgyzstan" partners fund;

- Implementation of the World Bank project "Support of Subsidiary Agricultural Service", with allocation of US\$7.6 million for import of agricultural equipment to the Kyrgyz republic;
- Implementation of the WB project of rehabilitation of irrigation systems and repair services totaling US\$8.6 million, including renovation of six canals;
- Continuation of the WB project of rehabilitation of internal water networks and creating the association of water users (project cost is US\$24.8 million);
- Extension of the network of credit unions in rural regions and increasing possibilities of the Kyrgyz agricultural-financial corporation for crediting rural producers in the amount of Kyrgyz som 200 million.

The Ministry of Agriculture and Water Resources must provide timely harvesting and processing of agricultural products.

TOURISM

In order to stimulate foreign and domestic tourism, the Government plans to attract foreign investments by offering tax and customs privileges, granting State guarantees and providing other ways of Governmental support. In 1999, it is planning to complete reconstruction of the "Ala-Too" hotel (with participation of a German partner) and the "Kyrgyzstan" hotel (with participation of Italian and US partners). Privatization processes in the resort/recreation sector should be accelerated. All visa and customs procedures for tourists will be simplified.

Implementation of the above mentioned measures for stabilization of the Kyrgyz economy will allow the Government to pay off all debts on pensions and salaries; to create conditions for a 1.5 time increase of pensions beginning from 2000.

Project Profiles

(Provided by U.S. Department of Commerce/BISNIS)

348

SUBJECT: TENDER FOR PRIVATIZATION OF KYRGYZTELECOM

Summary

The Government of the Kyrgyz, Republic has nominated the State Property Fund to hold the majority share of the 'Kyrgyztelecom' (Open Joint-Stock Company and the National Telecom Operator). The Government has decided to privatize a portion of Kyrgyztelecom through the sale of share packages in a competitive international tender. The State Property Fund calls for pre-qualification of interested parties.

Bid Overview

The successful bidder shall be required to make an investment of not less than U.S. \$150 million for the share package and in addition, offer a ten-year modernization plan.

Interested parties that meet the following two criteria, are invited to pre-qualify no later than June 4, 1999.

- The interested party, or at least one member of a bidding consortium, must have annual revenues that exceed U.S. \$200 million.
- The interested party, or at least one member of a bidding consortium, must be a Telecom Operator with not less than U.S. \$100 million of revenues from Telecom operations.

Bid Procedures

All interested parties and bidding consortia that meet the above two criteria can pre-qualify by forwarding the following information in English:

- i. Name and address of corporate headquarters;
- ii. Name, title, address, telephone and fax numbers of the individual, responsible for all matters concerning the pre-qualification;
- iii. One page overview of bidders' business operations, including a description of its existing telecommunications operations;
- iv. Copy of last annual report;
- v. Letter signed by authorized executive that states the bidder, or consortium, meet the two criteria described above and the bidder is interested in participating in the tender for the privatization of Kyrgyztelecom.

Two original sets of information should be sent to the advisor retained by the state property fund on behalf of the Government of the Kyrgyz Republic.

349

Namely:

Raiffeisen Investment AG

1. Marco Pongratz-Lippit
Reisnerstrasse 40
A-1030 Viena, Austria
Tel: & (431) 710-5400-47
Fax: & (431) 710-5400-69

2. Ivars J. Baks
114 Sansome Street, 10th Floor
San Francisco, CA 94104, U.S.A.
Tel: & (415) 398-1990
Fax: & (415) 362-3268

Note: There is no cost to pre-qualify, pre-qualified bidders have no obligation to submit a bid in the tender. A bidder may add or delete members of its consortium up to the moment of bid submission.

All bidders that pre-qualify will be notified by fax no later than June 9, 1999. The tender document will be issued on June 11, 1999 at no charge to all pre-qualified bidders, only pre-qualified bidders shall receive the tender documents and be permitted to submit bids. The due date for bids shall be September 17, 1999.

SUBJECT: KYRGYZ TRANSPORT AND COMMUNICATIONS PROJECTS

Summary

Below is the list of priority investment projects for transport and communications sectors in the Kyrgyz Republic. Currently, the Kyrgyz Government is looking for investors willing to participate in financing, designing and/or implementing the projects given below. End Summary.

The "Bishkek-Osh" Highway

The total length of the Bishkek-Osh Road is 625 km. The project cost is evaluated at U.S. \$240 million. Rehabilitation of this road is divided into three phases. The first phase involves rehabilitation of 138 km of the road and should be implemented in 1996-1999. The phase cost is U.S. \$92.98 million, including: U.S. \$50 million of the Asian Development Bank (ADB) credit; U.S. \$27 million of the Overseas Economic Cooperation Fund (Japan); and U.S. \$ 15 million - contribution of the Kyrgyz Republic. Contractors for the first phase are the "Suusamyр-Inter" Kyrgyz-Turkish Enterprise and the "Kelson" Iranian Company.

The second phase of the project envisages upgrading of another 207 km of the highway, with total funding of U.S. \$109.8 million, including: U.S. \$50 million provided by the ADB; U.S. \$40.8 million of the Overseas Economic Cooperation Fund (Japan); and U.S. \$19 million-contribution of the Kyrgyz Republic. It is expected, that the Korean "Samsung" Corporation will participate in reconstruction works of the second phase (contract number one). The third phase will cover the remaining 280 km of the road and will cost U.S. \$62 million. The ADB proposed to allocate U.S. \$40 million for this phase. The completion of the highway reconstruction is scheduled for the year 2002.

The "Bishkek-Torugari" Highway

This road will link the Chui, the Issyk-Kul and the Naryn Oblasts as well as will allow to establish road connection with Kazakhstan, China and with Pakistan and India through the Kara-Korum Highway. The project cost is U.S. \$189 million. In 1996, Islamic Bank of Development granted 298,000 dollars for the feasibility study. By now, this work has been completed.

The "Balykchi-Karakol-Balykchi-Tyup-Regen" Highway

This is a loop road around the Issyk-Kul Lake. The total length of it is 514 km. The road is the main one for the Issyk-Kul Oblast. It provides connection between the "Balykchi-Bishkek" rail road and the "Bishkek-Torugart" Highway. The road supports the development of the resort-recreation sector of the oblast. The project cost is U.S. \$63 million.

351

The "Osh-Sarytash-Irkeshtam" Highway

Irkeshtam is a mountain pass and a customs post at the Kyrgyz-Chinese border. The length of the road is 262 km. The Osh-Sarytash section of the road (184 km long) is part of the "M-41" International Highway. The Sary-Tash-Irkeshtam section is a part of the "Dushanbe-Jergetai-Karamyk-Sarytash-Irkeshtam" international road. The project cost is U.S. \$38 million.

Recently, Kyrgyzstan and Uzbekistan signed an agreement on the U.S. \$30 million Uzbek credit (interest free) for implementation of the project on reconstruction and repairs of the "Tashkent-Andijan-Osh-Sarytash-Irkeshtam" Highway. The credit conditions are as follows: 50 percent of the credit amount will be paid quarterly during 10 years (beginning from 01.01.2001). The remaining part of the credit will be paid during next 25-30 years from the money collected as road fee paid by third countries' truck drivers. It is expected that the transit fee will be U.S. \$200. In accordance with the agreement the Kyrgyz side will let Uzbek transit trucks go on the Osh-Sarytash-Irkeshtam Road without paying road fees and will grant customs privileges both at the Chinese and Uzbek borders.

The highway renovation will become the next stage of the revival of the Great Silk Road. It is planned to complete construction works on the Osh-Sarytash-Irkeshtam Road and open traffic by December 1, 1999.

The "Jambyl-Talas-Suusamyr" Highway

The road links the Chui, the Osh, and the Jalal-Abad Oblasts and allows road connection with Kazakstan. The project cost is U.S. \$14 million. The Kyrgyzstani Government signed an agreement with the Islamic Bank of Development on providing the grant for feasibility study totaling U.S. \$280,000.

The "Almaty-Bishkek-Tashkent" Highway

This highway requires reconstruction. This is the main road that links Kyrgyzstan, Kazakhstan, Uzbekistan, Turkmenistan, Iran and Turkey. Cloverleaf intersections including rail road intersections should be constructed as well. The project costs U.S. \$14 million.

The "Osh-Batken-Isfana" Highway

Reconstruction of the highway will allow Kyrgyz cargo and passenger traffic bypass territories of neighboring countries. The length of the road is 413 km. The project cost is U.S. \$133 million.

Bypass Roads

On December 5, 1998, a credit agreement between the Government of the Kyrgyz Republic and the Islamic Bank of Development was ratified on allotment of U.S. \$10 million for construction of the road bypassing the Madaniyat Village (Uzbekistan) and the 40 km "Jalal-Abad-Uzgen" Road.

The Transcontinental Rail Road

The State Directorate on Designing and Construction of Trunk Rail Roads under the Government of the Kyrgyz Republic was established in 1998. The Directorate is responsible for finding investors to design and construct the transcontinental rail road "Jalal-Abad-Torugart-Kashi (China)". The Chinese side is interested in constructing the road section within Chinese territory. This will be the shortest road linking Europe and Asia. The project cost is U.S. \$2-2.5 billion. The length of the road is 319 km. The Government plans to attract big investors to implement this project according to the "construction-operation-transfer" mode. The German and Japanese Governments are interested in donating the money for feasibility study for this project.

There are several large rail road networks which include the Russia-Mongolia-China Branch, the Europe-Central Asia Branch, and the Caucasus-Central Asia Branch currently serving the region. Now Kyrgyzstan has potential to construct a railroad of considerable importance. This railroad will allow trains to go through Kyrgyzstan from north to south and from West to East.

Railroad Transportation

There is a project of electrification of the "Lugovaya-Alambedin" section of the railroad. The project envisages upgrading of current capacity of this section, because, due to electrification, speed and carrying capacity of the trains will grow by 20 percent. This project implementation will allow to improve labor conditions of locomotive brigades and to prevent air pollution with exhaust fuels from diesel engines. The project cost is U.S. \$97.58 million.

The Railroad Department under the Ministry of Transport and Communications needs equipment for major repairs of cars. Since there is no complete set of equipment, the Department has to make arrangements for the repairs of cars in Kazakhstan, where repair cost is unreasonably expensive. The project cost is Kyrgyz SOM 59.98 million (approximately U.S. \$2 million at the current exchange rate is 30.5 Kyrgyz SOM per dollar).

Currently, the Kyrgyz Railroad has difficulties with fitting trains for long distance routes, because of significant wear-and-tear (service life of more than 30 years). There is a need to buy 60 more cars. The project cost is U.S. \$45 million.

Telecommunications

There is a project for modernization of TV and radio broadcasting in the Kyrgyz Republic. The project includes reconstruction of radio relay lines and their transfer to digital system; modernization of the TV and radio stations networks. The project cost is U.S. \$15 million.

In order to modernize postal service, the Transport and Communications Ministry plans to equip all post offices with computers and to improve their motor pool. The project cost is U.S. \$2.8 million.

The "Kyrgyztelecom" Company, the national provider of telecommunications services with exclusive right for long distance and international communications services until the year 2008, is working on creation of an integrated network for data transmission and on construction of new radio relay lines for phone communication with China.

The Government and Parliament of the Kyrgyz Republic have both passed decrees approving privatization of Kyrgyztelecom. The majority of shares of Kyrgyztelecom are held in trust by the State Property Fund. Through an international tender process, the Austrian Bank "Raiffeisen Investment AG" was selected as the advisor for the privatization process. It is expected that privatization of approximately 40% of the shares of Kyrgyztelecom will be completed in the Fall of 1999.

Contact Information

1. Ministry of Transportation and Communications
Mr. Jantoro Satybaldiyev, Minister
42 Isanov Street, Bishkek 720079, Kyrgyz Republic
Tel: 996 (312) 21 66 72
Fax: 996 (312) 21 36 67, 62 17 10

2. Mrs. Valentina Davydova,
First Deputy Minister and Director of the Department of Communications
96 Chui Ave., Bishkek 720000, Kyrgyzstan
Tel: 996 (312) 22 54 56, 22 48 92
Fax: 996 (312) 66 29 60

3. The State Directorate on Designing and Construction of Trunk Railroads
under the Government of the Kyrgyz Republic
Mr. Erkinbek Masadykov, Director General
1, Prospect Mira, Bishkek 720066, Kyrgyzstan
Tel/Fax: 996 (312) 21 55 64, 42 38 52
E-Mail: Apeco@Imfiko.Bishkek.SU

354

4. Republican Industrial Union, Covering Radio-Relay Main Lines and TV and Radio Broadcasting
Mr. Bektemir Beishekenov, General Director
122 Erkindik Blvd., Bishkek 720041, Kyrgyzstan
Tel: 996 (312) 36 95, 27 35 34
Fax: 996 (312) 27 35 91

5. Joint-Stock Company "Kyrgyztelecom"
Mr. Salmor Alymkulov, President
96 Chui Avenue, Bishkek 720000, Kyrgyzstan
Tel: 996 (312) 62 16 16, 66 00 10, 62 10 62
Fax: 996 (312) 62 07 07

SUBJECT: ADB COUNTRY ASSISTANCE PLAN - 1999-2001 - KYRGYZSTAN

Summary

This report outlines the projects the Asian Development Bank is planning to finance in Kyrgyzstan in eight sectors -- the urban development sector, energy sector, transport and communications sector, environment sector, health and population sector, education sector, agriculture and natural resources sector, and other sectors -- for the next two years. This is provided as advance information for U.S. firms. Detailed information on the projects will become available as they are processed and will be published in the Asian Development Bank Business Opportunities (available by subscription from the ADB at U.S. \$100.00/year) and from the EBB and Internet.

Urban Development Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|--|------------------------|
| - | 2000 Loan Community-based Infrastructure Services Sector | Amount (\$M) \$20 |
| - | 2000 Technical Assistance Program Training Program for Rural Infrastructure Services | Amount (\$'000) 650 |

Energy Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|---|------------------------|
| - | 2000 Loan Sub-regional power transmission line | Amount (\$M) 20 |
| - | 1999 Technical Assistance Program Industrial pollution control and environment management | Amount (\$'000) 600 |

Transport and Communications Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|---|--------------------|
| - | 1999 Loan Sub-regional road rehabilitation in Kaz and Kgz | Amount (\$M) 5 |
| - | 2000 Loan Third road rehabilitation | Amount (\$M) 40 |

356

| | | |
|---|---|------------------------|
| - | 1999 Technical assistance program Third road rehabilitation | Amount (\$'000) 650 |
| - | 2000 Technical assistance program Institutional support in the transport sector | Amount (\$'000) 650 |
| - | 2001 Technical assistance program Fourth road rehabilitation | Amount (\$'000) 700 |

Environment Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|---|------------------------|
| - | 1999 Technical assistance program Industrial pollution control and environment management | Amount (\$'000) 600 |
|---|---|------------------------|

Health and Population Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|---|------------------------|
| - | 2001 Loan Community-based early childhood development | Amount (\$M) 20 |
| - | 2000 Technical assistance program Community-based early childhood development | Amount (\$'000) 700 |
| - | 2001 Technical assistance program Institutional support for early childhood development | Amount (\$'000) 650 |

Education Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|--|------------------------|
| - | 2001 Loan Third education | Amount (\$M) 30 |
| - | 2000 Technical assistance program Training program for rural infrastructure services | Amount (\$'000) 650 |
| - | 2001 Technical assistance program Strengthening basic education | Amount (\$'000) 650 |

357

Agriculture and Natural Resources Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|--|----------------------------|
| - | 1999 Loan Agriculture area development | Amount (\$M) 40 |
| - | 2001 Loan Second agriculture area development | Amount (\$M) 30 |
| - | 1999 Technical assistance program Capacity building program for the Ministry of Agriculture and Water Resources | Amount (\$'000) 650 |
| - | 2000 Technical assistance program Capacity building program for agriculture in selected oblasts | Amount (\$'000) 700 |
| | Second agriculture area development | 650 |

Other Sector Projects, 1999-2001

Kyrgyz Republic

| | | |
|---|--|------------------------|
| - | 1999 Loan Pension reform program | Amount (\$M) 15 |
| - | 1999 Technical assistance program Strengthening tax administration | Amount (\$'000) 350 |
| | Policy support for pension reform capacity building for the President's Office | 600 250 |

