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**CENTRAL ASIAN REPUBLICS OIL &  
GAS SECTOR REFORM PROGRAM  
DELIVERY ORDER No.17**

**TURKMENISTAN**

*Status Report*

*Prepared for:*

USAID, Bureau for Europe and the New Independent States  
Energy and Infrastructure Division,  
1300 Pennsylvania Avenue N.W.  
14th Street Entrance  
Suite 5.10-070  
Washington, D.C. 20004-3002

*Prepared by:*

Hagler Bailly Services, Inc.  
1530 Wilson Boulevard  
Suite 900  
Arlington, VA 22209-2406  
(703) 351-0300

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## CONTENTS

### Executive Summary

### Chapter 1. Current Oil and Gas Investment Environment

- 1.1 Roles and Responsibilities of Oil and Gas Institutions
  - 1.11 Cabinet of Ministers
  - 1.12 Ministry of Oil and Gas Industry and Mineral Resources
  - 1.13 State Concerns and Corporation
  - 1.14 State Fund
  - 1.15 Competent Body
  - 1.16 Other Agencies
  - 1.17 Government's Decision Making Process
- 1.2 Fiscal Terms
- 1.3 Foreign Donor Activities
- 1.4 Other Key Issues

### Chapter 2. Ideal Framework for Enhancing Oil and Gas Investment

- 2.1 Oil and Gas Policies
- 2.2 Oil and Gas Legislation
- 2.3 Oil and Gas Rules and Regulations
- 2.4 National Oil Company
- 2.5 Oil and Gas Contracts and Agreements
- 2.6 USAID's Technical Assistance and Training Project

### Chapter 3. Recommended Changes in the Structure of the Oil and Gas Sector

- 3.1 Oil and Gas Policies
- 3.2 Oil and Gas Legislation
- 3.3 Oil and Gas Rules and Regulations
- 3.4 National Oil Company
- 3.5 Oil and Gas Contracts and Agreements

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## EXECUTIVE SUMMARY

The purpose of this report is to analyze the current legislative and institutional framework for the oil and gas sector in Turkmenistan and recommend changes that would assist in developing its indigenous capabilities to exploit its resources and enhance its ability to attract and manage foreign investment. This report was prepared in partial fulfillment of deliverables required under USAID's Energy Sector Institutional Reform Project, Delivery Order No. 17 and is a follow up of an earlier report under the same Delivery Order, "Turkmenistan: Oil and Gas Sector Reform, Status Report," dated July 15, 1997.

Turkmenistan is endowed with significant hydrocarbon resources, both discovered and potential. Over the past year, it has taken steps to restructure its oil and gas sector, enacted a new, comprehensive, Petroleum Law and model agreements which substantially conform to international standards, and announced a fast track international tender for the exploration of highly prospective Caspian Sea. International tenders for the onshore areas are also planned. The legislative and institutional reforms to date have been encouraging; however, Turkmenistan needs to continue the process so that it can effectively exploit oil and gas resources and attract and manage foreign investment towards that purpose.

In this report, five areas of reforms are discussed. They are oil and gas policies, legislation, rules and regulations, national oil company, and contracts and agreements. The most important task facing the Government of Turkmenistan is to write, debate, adopt, and revise rules and regulations to implement the new Petroleum Law. It is proposed that, in the interim, this effort be undertaken by a separate Oil and Gas Regulatory Agency or department (OGRA) of the Competent Body with a measure of independence. This agency or department could be spun off into a full fledged independent agency if and when the conditions warrant. The second recommendation relates to reforms in the pipeline sector, from restructuring of the pipeline organizations into one or more manageable entities to reform in accounting practices to bring them up to international standards and to allow development of an objective, transparent, cost based tariff methodology. The activities in the pipeline sector could also be regulated by the above mentioned OGRA. Third recommendation is that Turkmenistan consider combining the three State Concerns active in the upstream oil and gas sector to create a single, streamlined, financially viable, national oil company (NOC) along the same model as Indonesia and Malaysia. The NOC would explore and produce in its own areas, with and without joint ventures with foreign oil companies, and also coordinate the activities of all foreign contractors in other areas of Turkmenistan. The objective would be to develop indigenous capabilities to exploit oil and gas resources and make the NOC a viable candidate for privatization.

USAID is currently negotiating a Memorandum of Understanding (MOU) to cover technical assistance and training projects contemplated under the Delivery Order No. 17. A major portion of this work relates to oil and gas regulations, accounting reforms, and pipeline tariff methodology. These activities are expected to have major impact on Turkmenistan's ability to manage its oil and gas resources and to create a favorable environment for foreign investment.

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## **CHAPTER 1**

### **CURRENT OIL AND GAS INVESTMENT ENVIRONMENT**

The current oil and gas investment environment in Turkmenistan can be characterized as cautiously optimistic. Turkmenistan is endowed with significant hydrocarbon resources, both discovered and potential. It has the fourth largest reserves potential of gas in the world and is a major exporter of gas. Over the past year, it has taken steps to restructure its oil and gas sector, enacted a new, comprehensive, Petroleum Law and model agreements which substantially conform to international standards, and announced a fast track international tender for the exploration of highly prospective Caspian Sea. Several major international oil companies (IOC) have purchased data and have expressed interest in participating in the tender. International tenders for the onshore areas are also planned. Turkmenistan is taking positive steps to improve its transportation infrastructure to export oil and gas and planning pipeline alternatives to avoid total reliance on the Russian system and the FSU markets. Timely success in these endeavors, however, can only be assured by regional political and economic cooperation and Turkmenistan's persistence in continuing reform of its legislative and institutional framework for the oil and gas sector.

In this report, the status of Turkmenistan's oil and gas legislation, regulations, process, and institutions are discussed. It is followed by a comparison with an "Ideal Framework" for enhancing oil and gas investments and recommended changes that would help develop Turkmenistan's indigenous capabilities to manage its oil and gas resources and enhance its ability to attract and manage foreign investment. Also described are specific activities and training courses planned under USAID's Memorandum of Understanding with the Government of Turkmenistan and how they can help in achieving the above objectives.

#### **1.1 ROLES & RESPONSIBILITIES OF OIL AND GAS INSTITUTIONS**

The present structure of the oil and gas institutions in Turkmenistan began to emerge with the Presidential Decree, "Efficient Oil and Gas Industry Administration and Rational Use of Mineral Resources" dated July 1, 1996. The Decree disbanded the former Ministry Of Oil and Gas which essentially controlled all oil and gas institutions in the country. It created a number of new, independent, government owned State Concerns and State Corporations to carry out the upstream and downstream functions of the oil industry. A new Ministry of Oil and Gas Industry and Mineral Resources was created as a planning and policy making body with no direct oversight responsibility over the new entities. The State Concerns and Corporations were to be headed by Chairmen with the rank of State Minister. The new entities were given defined functions and "free" operating latitude for everyday business. The three State Concerns for Oil, for Gas, and for Construction of Surface Facilities report to the President and the Cabinet of

Ministers. The heads and deputies of these Concerns are appointed by and answer to the President alone.

The next development in the evolution of the oil and gas sector was the new Petroleum Law which was signed by the President on December 30, 1996 and which became effective on March 10, 1997 date of publication. The Petroleum Law assigned the primary role in exploitation of the petroleum resources and the conduct of petroleum operations to the Cabinet of Ministers. It also defined in detail the roles and responsibilities of a new government agency, the Competent Body, with exclusive powers to issue licenses, negotiate and execute exploration and production agreements, and control their implementation. The Competent Body was actually set up by Presidential Decree No. 3189, "The steps to be taken in order to implement the Law of Turkmenistan on Hydrocarbon Resources (Petroleum Law)" and accompanying Ordinance, "About the Competent Body for the Exploitation of the Petroleum Resources at the President of Turkmenistan." The Ordinance also created an "Expert Council" of representatives from various ministries and organizations to assist in the functioning of the Competent Body.

With the above Law and decrees, Turkmenistan has taken a quantum step forward towards a rational framework for the development of petroleum resources. Further actions by the Government of Turkmenistan are likely that would complete this framework in the near future. An organization chart is attached describing the existing structure of Turkmenistan's oil and gas sector. It should be noted that there are still many unresolved issues and, to date, it has not been possible to obtain further details or seek further clarification from the Government. The following discussion, therefore, reflects the current understanding of the roles and responsibilities of the institutions.

### **1.11 Cabinet of Ministers**

The Cabinet of Ministers, headed by the President, is the highest executive and administrative body in Turkmenistan. It consists of several Deputy Chairmen and Ministers. The Cabinet of Ministers is responsible for implementing the laws, presidential decrees, and decisions of the Khalk Maslakhaty, the highest elected people's council. Among its assigned duties in the Constitution are to (1) carry out the state management of economic and social development of the country and the rational use and protection of the natural resources, (2) form committees, main administration, and other departments as needed, and (3) direct the activity of government institutions, state enterprises, and organizations. The Constitution also gives the Cabinet of Ministers, within its scope of responsibilities, the authority of issuing binding decrees and instructions.

The new Petroleum Law also grants the Cabinet of Ministers the authority of ownership, exploitation, and disposal of petroleum resources. The Law specifically assigns the Cabinet of Ministers the responsibility for:

- ▶ Defining the strategy for exploitation of petroleum resources including increases in productive capacity and rates of production.
- ▶ Setting priority of exploitation of petroleum resources and rules for their protection.
- ▶ Taking measures to protect natural environment, public life, and health and ensuring safe and healthy working conditions during the Petroleum Operations.
- ▶ Setting restriction on Petroleum Operations in certain areas to protect holy sites and historical and cultural monuments.
- ▶ Although the Competent Body (discussed below) is designated as the entity to develop rules and regulations for petroleum operations, its authority becomes operative only "under the assignment by [or by the order of] the Cabinet of Ministers..."

The foregoing would suggest that the Cabinet of Ministers is ultimately responsible for the organization, implementation, regulation, and control of oil and gas activities in Turkmenistan. However, certain agencies, reporting directly to the President, have been created through Presidential Decrees which appear to bypass the more traditional structure described above. Examples are the Agency For Foreign Investment and the newly created Competent Body for the Exploitation of the Petroleum Resources both of which report to the President of Turkmenistan. The former was instrumental in the development of the new Petroleum Law and is headed by a Deputy Chairman of the Cabinet Of Ministers. The Competent Body also has significant original authority granted by the new Petroleum Law and is headed by a Minister.

#### **1.12 Ministry of Oil and Gas Industry and Mineral Resources**

In the July 1, 1996 Decree, the Ministry Of Oil and Gas Industry and Mineral Resources was assigned the responsibility for:

- ▶ State control over rational use of the mineral resources.
- ▶ Analytical research, preparation of long range plans and state programs for the development of mineral resources, and increasing the recovery and processing of oil, gas, and solid minerals.
- ▶ Uniform Government and technology policy on issues related to the development of oil and gas fields without interfering in the day to day operations of the State Concerns.

The new Petroleum Law does not directly mention the Ministry Of Oil and Gas Industry and Mineral Resources. Presumably, the Ministry would continue to function as a policy/analysis/planning body under delegation by the Cabinet of Ministers.

### 1.13 The State Concerns and Corporations

The July 1, 1996 Decree also created five new independent oil and gas entities out of all government owned organizations engaged in upstream and downstream sectors. These five entities and their responsibilities are :

- ▶ Turkmenneft: Oil field development and production in all of Turkmenistan.
- ▶ Turkmengas: Gas field development and production in all of Turkmenistan
- ▶ Turkmenneftegasstroi: Construction of oil and gas surface facilities
- ▶ Turkmengeologiya: Oil, gas, ground water, and mineral exploration and deep drilling
- ▶ Turkmenneftegas: Production & sale of oil products and the processing and sale of natural gas including foreign trade

The first three State Concerns are state owned companies reporting to the President and the Cabinet Of Ministers. The chairmen and their deputies are appointed by President and held accountable by him to achieve oil and gas production goals set by "The Program for the Development of Oil and Gas Industry in Turkmenistan." The financing of programs aimed at increasing recovery of oil and gas comes from the profits of the Concerns and the State Fund for the Development of Oil and Gas Industry and Natural Resources. The role of the Turkmenneftegasstroi is to construct oil and gas surface facilities on orders of Turkmenneft and Turkmengas and other oil and gas companies.

The organization charts in brochures published during 2<sup>nd</sup> Turkmenistan International Oil & Gas '97 Projects Conference dated March 12-13, 1997 suggest that State Concern Turkmenneft comprises of enterprises engaged in production, drilling, and pipeline operations split on geographical lines.

Similarly, the State Concern Turkmengas incorporates two enterprises engaged in production of natural gas at Velayat level (Mary and Lebap). It also includes enterprises for oil and gas exploration in Akhal Velayat, and enterprises engaged in drilling, maintenance, transportation of natural gas, automation, telecommunication, and purchasing. Turkmengas also has an Oil and Gas Institute which does geological investigations, designs pipelines, and consults on major project evaluations. In the past, the Institute used to develop and had the authority to approve projects including surveys, drilling, production, and transportation.

The fourth oil and gas entity is Turkmengeologiya State Corporation which was formed by combining geological research, field geophysics, and deep exploratory drilling that were part of the old exploration company and the Ministry of Oil and Gas. Its charter is to explore for oil and gas (along with ground water, solid minerals, and raw materials for the chemical and

8

construction industries) on the orders of the State Concerns, other oil and gas companies, and organizations. The financing for Turkmengeologiya's activities also comes from the State Fund. An innovative feature of this organization is that it is to establish a system of large bonuses as incentive for discoveries.

The new Petroleum Law brought the State Concerns engaged in upstream activities under (by inference) Competent Body's jurisdiction. It appears that the State Concerns Turkmenneft and Turkmengas will no longer have the exclusive rights to explore, develop, and produce in all of Turkmenistan. Their existing operations will need to be rationalized by applying for a license. For new acreage, they will have to apply for licenses, negotiate contracts, and compete alone or in joint venture with foreign entities. The upstream industry will then consist of State Concerns operating in their own areas, in joint venture with foreign companies in existing or new areas, and foreign companies operating in their own areas. The new Petroleum Law also talks about the State Concerns assisting the Competent Body in discharging its functions.

Finally, the July 1, 1996 Decree created Turkmenneftegas Trade Corporation for downstream petroleum activities (refining, marketing, oil and gas export, barter trade). Turkmenneftegas is responsible for :

- ▶ Production of refined products and processing of natural gas.
- ▶ Distribution of petroleum products, LPG, and natural gas within Turkmenistan.
- ▶ Export of crude oil, petroleum products, LPG, and natural gas.
- ▶ Manage the barter trade associated with natural gas export.

The Decree stipulates that all profits (revenues?) from the export of natural gas and oil products and from the sale of surplus oil products at free market prices be deposited in the State Fund and after settlement with the budget and raw material suppliers, be spent to finance the development of oil and gas industry.

#### **1.14 State Fund for the Development of Oil and Gas Industry and Mineral Resources**

The State Fund was reorganized by the July 1, 1996 Decree to include representation on the Board of the Fund by the Minister of Oil and Gas Industry and Mineral Resources and Chairmen / Presidents of the State Concerns and Corporations. The Fund is supervised by an Executive Director of the Fund who is also a Board Member. The President of Turkmenistan is the Chairman of the Board. The Fund is charged with financing the production and refining of crude oil, gas, refined products, and the overall development of minerals and other raw materials. A subsequent Presidential Decree No. 2727, "On Determination of the Procedure of Relations of the State Fund of Oil and Gas Industry Development and State Trade Corporation "Turkmenneftegas" and State Budget of

Turkmenistan” dated July 4, 1996, specified the procedures for the collection and disbursement of funds.

### **1.15 Competent Body**

As mentioned before, the primary function of the Competent Body is to issue licenses, negotiate and execute exploration and production contracts, and control their implementation. The new Petroleum Law also gives the Competent Body along with other state entities (within their competence) broad regulatory control over the conduct of petroleum operations. To assist in these functions, the Ministry of Oil and Gas is to provide the Competent Body with (a) description, criteria, and directives for uniform rules for the development of petroleum fields and their protection and (b) the strategy for exploitation of petroleum resources as defined in the Comprehensive Program for the Development of the Petroleum Industry. The Competent Body is expected to bring the uniform rules into compliance with international standards and use them to prepare requirements for negotiations and signing of contracts. Similarly, the State Agency for Foreign Investment is to provide the description, criteria, and directives on the general investment policy of Turkmenistan to be used in preparing guidelines on economics and investment issues during negotiations and comprehensive evaluation.

The Competent Body has the authority, if nominated by the Government (Cabinet of Ministers per the Petroleum Law, and the President per the June 6, 1997 Decree), along with contractors, to negotiate with foreign states for the construction, operation, and use of petroleum transportation facilities through their territories.

The Competent Body has also been given the responsibility to determine the direction of research and development work at various institutions. It will also coordinate contract and investment feasibility studies and management training. The operation of the Competent Body is to be funded by bonuses and royalties paid by the contractors, license fees, and proceeds from tender activities.

The organization of the Competent Body consists of the following departments:

#### **Department of License**

The Department of License prepares the preliminary investment proposal either for carrying out a tender or for direct negotiations. It organizes the tender, accepts applications for licenses, pre-qualifies investors, receives bid proposals, and with the help of an “Expert Commission” carries out a comprehensive evaluation of bids. The documents on the investment project are then transferred to the Department of Negotiations. After negotiations are complete, the Department of License carries out the final comprehensive evaluation of the (1) preliminary draft contract, (2) report on negotiations, and (3) feasibility of issuing the

license, and submits them for review by the "Expert Council." It also provides the results of evaluation to the Agency for Foreign investment. If the Expert Council's decision is positive, the Department of License prepares the draft decree and submits it to the President along with application for the license with approving signature of all members of the Expert Council. After approval of the President, the Department of License issues the license and signs the contract. Final documents are prepared and sent to the Agency for Foreign Investment for recording in the state register for investments. The final documents are also sent to the Control Department to begin their work.

### **Department of Negotiations**

The Department of Negotiations assembles a group of experts from its staff and invited consultants and prepares scenarios, strategy, and tactics for negotiations for approval by the President. It negotiates using the approved model agreements and Presidential guidelines and drafts contract documents. In the event of disagreements, it promptly advises the President with alternatives for resolving the issues. At the end of negotiations, it prepares a report on the negotiations, draft contracts, and feasibility of issuing the license.

### **Department of Control**

The function of the Department of Control is to monitor and control the implementation of the Contracts and to assure compliance with the terms of the licenses, the contracts, and the Petroleum Law. To facilitate closer control, it appoints staff members of the Competent Body to the Management Committees of respective contractor / joint venture operating entities. The Department of Control documents any shortcomings and initiates a series of notifications. In case of breaches that are cause of revocation of license, it recommends appropriate actions to the Expert Council. On approval by the Expert Council, a draft decree is prepared for Presidential signature revoking the license.

### **Expert Council**

The Expert Council consists of twelve members appointed by the President. The main purpose of the Expert Council is to advise the president positively or negatively on such matters as approving the issuance of a license, signing of a contract, and revoking or terminating the same. To provide comprehensive expertise, representatives from all relevant Ministries are appointed to the Council. The Annex Two of the June 6, 1997 Decree lists appointees to the first Expert Council. They include the highest level of officials from the Ministry of Oil and Gas Industry and Mineral Resources, Agency For Foreign Investment, Ministry of Foreign Economic Relations, State Concerns, Ministry of Nature and Environmental Protection, Main State Inspection for Standards, Metrology, Protection of Underground Resources and Safe Work Conditions, Military Fire Fighting Services, and the State Fund.

### **1.16 Other Agencies**

There are other Government agencies that may have a role in oil and gas sector particularly in the area of regulations and project/contract approvals. The new Petroleum Law states that the State control over the conduct of petroleum operations shall be carried out by the Competent Body and other State entities (within their competence) in accordance with current legislation. By inclusion on the Expert Council, it is presumed that the Ministry of Nature and Environmental Protection and Main State Inspection for Standards, Metrology, Protection of Underground Resources and Safe Work Conditions, the main committee for Carrying Out Compliance with Technical Standards, and the Military Fire Fighting Services will be involved.

The new Petroleum Law states that natural environment and health protection measures for the population and the contractors' personnel are the obligatory condition for planning and carrying out any types of petroleum operations. Before starting a conduct of petroleum operations a contractor shall submit to the special competent State entities a plan for the natural environment protection measures that he intends to adopt in the implementation of its work program. No state entities are identified in the Law but is presumed to include the Ministry of Nature and Environmental Protection. The competent State entities are to approve the plan in writing within 30 days of the date of submission. Before starting the conduct of petroleum operations and for the entire period of their conduct, a contractor shall set up a monitoring system for obtaining comprehensive current information on changes occurring in the natural environment and on the nature of environmental impact of the petroleum operations conducted, with the purpose of taking necessary measures to eliminate and reduce the negative impact on the natural environment and ensure ecologically safe conduct of petroleum operations.

The environmental impact statement and monitoring specified in the Petroleum Law reinforces similar provisions approved by Presidential Decree, "Regulations on the Ministry of Nature and Environmental Protection" dated August 4, 1993. This Decree also charges the Ministry with inspection duties. Further studies are needed to clarify the intended roles and responsibilities of these agencies with respect to the environment and technical standards.

### **1.17 Government's Decision Making Process**

The formal mechanism for Government's decisions in the oil and gas sector is not clear. The majority of decisions in the past appear to have been made by Presidential Decrees on individual project basis. The procedure for consultation within the Cabinet of Ministers, the Madzhlis, and Khalk Maslakhaty are not fully known. Examples of some of the Presidential decrees are:

- ▶ February 10, 1993 Presidential Decree authorizing State Concerns Turkmenneft and Chelekenmorneftegaz to sign contracts (coordinated by Cabinet Of Ministers) and documents establishing Joint Ventures with Bidas, Larmag, Nobil Drilling, and Istpak International who were the winners of international tender.
  
- ▶ July 2, 1996 Presidential Decree (No. 3302) authorizing Ministry of Oil and Gas Industry and Mineral resources to make a Production Sharing Agreement with Petronas on Lubkin, Barinov, and Livanov fields with rights to carry out exploration, development, and production of oil and gas and exempting them from all taxes and fees except those envisaged in the Agreement.
  
- ▶ August 7, 1996 Presidential Decree (No. 3378) authorizing Ministry of Oil and Gas Industry and Mineral resources and the State Concern Turkmenneft and Monument to sign a Production Sharing Agreement on the Barun, Nebit Dag, Kumdag, Kezylku, and Garadepe deposits with the right to carry out exploration and production of oil and gas and exempting Monument from all taxes and fees except those envisaged in the Agreement.
  
- ▶ May 27, 1997 Presidential Decree appointing a State Commission headed by B. Sarjayev, Deputy Head of the Cabinet of Ministers and Minister of Oil and Gas Industry and Mineral Resources to coordinate the activities of The Agency for Foreign Investment and Ministry of Oil and Gas in organizing and holding an international tender for exploration and exploitation of Hydrocarbons within the Caspian Sea Shelf.

With the formation of the Competent Body, the role of tendering and negotiating future contracts (with the exception of Caspian Sea) has shifted to the Competent Body. However, the contracts will continued to be approved via a Presidential decree.

## **1.2 FISCAL TERMS**

Fiscal terms determine how the incremental revenues, after all costs are deducted, produced by a successful oil and gas venture are shared between the Government and the contractor. These fiscal terms are important elements in determining the relative attractiveness of a country from an investment point of view. In Turkmenistan, the fiscal terms are specified in the new Petroleum Law and the Production Sharing Contract. The Petroleum Law specifies that the contractor may be liable for paying:

- ▶ Negotiated lump sum bonus (1) on signature and (2) on reaching certain levels of production, as specified in the contract.

- ▶ Negotiated Royalty payments as specified in the contract. The model contracts envisage a sliding scale royalty.
- ▶ Negotiated Government's production share. Although not specified in the Petroleum Law, it is a usual feature of the production sharing contracts.
- ▶ Profits Tax. The current tax rate on oil and gas operations is 25%. The manner of calculating profits (including rate of recovery of capital) is to be specified in the contract.
- ▶ The new Petroleum Law exempts the contractor from payment of customs duties and other local taxes.
- ▶ Sub-contractors pay profits taxes at the same rate as the contractor which is currently 25%.
- ▶ The employees of the contractor and its sub-contractors pay income tax at the rate specified in Turkmenistan legislation and the contract.

Turkmenistan's fiscal mechanisms for oil and gas are in line with those countries that offer production sharing contracts. It is not possible to judge the relative attractiveness of the fiscal terms without knowing actual royalty rate, government's profit share, and cost recovery mechanism actually negotiated with existing contractors. From oil companies point of view, it would have been desirable that the royalty rates and Government's profit share were not left for negotiations but specified in the Petroleum Law or would be specified in the bidding process so that the same rates apply to all oil companies. This would simplify negotiations as the signature and production bonuses and the work programs would be the only determinants for contract award. Also, it should be noted that large signature bonuses increase the risk and generally hinder foreign investment. Companies would prefer, and it is in the interest of the country, to spend a similar amount on exploration instead. Large production bonuses are also not desirable as they may distort investment decision making as production approaches specified levels. Perhaps, as Turkmenistan gains experience, these deficiencies could be corrected.

### **1.3 FOREIGN DONOR ACTIVITIES**

In many countries, foreign entities such as the World Bank and Asian Development Bank have facilitated development of oil and gas resources by providing loans on favorable terms. No institution is currently funding oil and gas projects in Turkmenistan. It is rumored that a local entity is negotiating with International Finance Corporation to help set up a joint venture in the oil service sector.

#### **1.4 OTHER KEY ISSUES**

Investment in the oil and gas sector is severely constrained by unresolved issues such as export pipelines, uncertainties with legal status of the Caspian Sea, environmental concerns, and the apparent inconsistent application of existing legislation. The following is a brief discussion of two of these issues:

##### **Pipelines**

Availability of alternate gas markets and alternate low cost export pipelines are important to the rapid development of the oil and gas sector. Turkmenistan is currently too dependent on Russian transportation system to export oil and gas. Tariffs currently run at \$60 to \$70 per ton (about US\$ 10 per barrel) for oil and over US\$ 40 per thousand cubic meters (over US\$1.13 per thousand cubic feet) for gas. Turkmenistan is extending its oil and gas pipelines to Iran. These pipelines should be completed in 1997 and offer some relief. The recent US decision not to object Turkmen gas moving to Turkey via Iran should facilitate construction of pipeline to Turkish and perhaps European markets. For the long term, Turkmenistan is looking at other pipeline options; however, whether they come to fruition would depend on market demand, construction costs, financing capabilities, and political conditions in neighboring countries.

The new Petroleum Law provides for creation of new pipeline companies owned by the Government, contractors, and independent investors, either singly or jointly. The Law envisages that these pipelines will be designed and constructed assuming anticipated throughput from the area in the medium and long term. The excess capacity of the pipelines will be available for use by other independent producers on paying non-discriminatory tariff set by the pipeline company. The pipelines will be built and maintained according to international standards for operation, maintenance, safety, and security. The responsibility for enforcing these standards is vested in the Cabinet of Ministers.

The draft model production sharing agreement further clarifies rules with respect to the pipeline companies. The pipeline company will pay profits tax at the same rate as the contractor and will have the same exemptions from paying customs duties and other taxes. Similar rules apply for their subcontractors and their employees. The pipeline tariff will be based on the principle of cost of service and a reasonable rate of return for investors. Pipeline companies will assure open access and will be non-discriminatory. Contractor's proposal with respect to pipeline transportation will be reviewed by a special "Pipeline Committee" of interested parties assembled for this purpose. It should be noted that tariffs are not included in operating costs for cost recovery purposes. In case pipeline capacity is limited, available capacity will be shared between users in proportion to their production capacity.

Turkmenistan has an extensive pipeline network for gas transmission which was designed to serve export markets via Russia. The main pipelines connect the giant gas field, Dauletabad, and other gas fields in the east, with the Russian system after transiting through Uzbekistan and Kazakstan. There is a gas pipeline in the west which traverses the Caspian coast and connects to the export pipelines in Kazakstan. There is also a major oil pipeline along the Caspian Coast which terminates at the Turkmenbashi refinery. Both oil and gas pipelines are being extended into Iran. The operating condition of the pipelines and equipment are not known. However, based on experience in Kazakstan, the Turkmen pipeline infrastructure most likely needs to be refurbished and upgraded to handle projected production from existing fields and from those expected to be discovered by the new exploration effort. Reforms are needed to attract foreign investment in this sector. Turkmenistan should consider restructuring its pipeline system into one or more manageable entities and streamlining their organizations. Accounting reforms should be instituted to better understand the cost structure, bring account codes up to international standards, and develop a cost of service based tariff methodology which is both transparent and objective and which can sustain continuing pipeline operations. Finally, systematic regulation of pipeline construction, maintenance, operations, and tariffs, preferably through an independent regulatory agency, should be instituted.

#### **Legal Status of Caspian Sea**

Turkmenistan is undertaking a major step in the development of oil and gas resources in the Turkmenistan's portion of the Caspian shelf. It recently announced the first round of international tender with a fast track selection of bid winners by January 1, 1998. The legal status of the Caspian Sea, i.e. the extent of territorial and economic rights of each littoral states to exploit Caspian Sea's resources, however, is in dispute and would certainly hinder the exploration and development of oil and gas in the Caspian Sea. Turkmenistan recently took strong exception to an Azeri deal with Lukoil and Rosneft to develop 375 MMB Kiapaz field. It continues to contest the ownership of Azeri and Chirag fields being developed by AIOC. Aside from territorial claims, the fundamental issue is the Russian (and Iran's) desire to retain influence on the development of Caspian resources including any competing pipeline(s) that might be built to transport those resources. The latest proposal is that each country will have an exclusive right to a 45 mile coastal zone. The remainder of Caspian would be shared by all coastal states (the so called "doughnut" proposal). It would be necessary for Turkmenistan to seek accommodation with its neighbors and Russia to allow the development of its Caspian sector to proceed in a timely manner.

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## CHAPTER 2

### IDEAL FRAMEWORK FOR ENHANCING OIL AND GAS INVESTMENT

Turkmenistan's legal framework for the oil and gas sector should be considered in relation to the following "ideal" to identify problem issues and the proposed course of action by the Government to resolve those issues. The ideal framework is based on the following five levels of legal structure:

#### 2.1 OIL AND GAS POLICIES

The Oil and Gas Policies are broad and general guidelines, the capstone for setting overall government objectives such as strategy of exploitation of oil and gas resources, priority of oil and gas investments, allocation of state resources, and attraction of foreign investment set at the highest level of government.

In Turkmenistan, the highest policy making body for the oil and gas sector, appropriately, is the Cabinet of Ministers. The Ministry of Oil and Gas Industry and Mineral Resources prepares a comprehensive plan for the development of petroleum resources and is responsible for developing consistent Government and technology policies. The Agency for Foreign Investment assures that the plans for the oil and gas sector fit Turkmenistan's overall investment goals.

Turkmenistan's policy since early days of independence has been to effectively restructure the oil and gas complex and to put in place an efficient management system. In November, 1993, Turkmenistan set its goal to dramatically increase its oil and gas production. That year, the President signed the "Concept of Development of the Oil and Gas Industry in Turkmenistan for the Period up to 2020." It has not been possible to review this conceptual plan and it is not known if it has been updated recently. The present Turkmenistan focus in the upstream oil and gas sector appear to be on three areas, namely resolution of payment disputes with delinquent gas importing countries and seeking accommodation with Russia/Gazprom, finding alternate markets and transportation systems for its gas (Iran/Turkey and Pakistan), and opening up of exploration and production areas for foreign participation beginning with the Caspian Sea Tender. These are indeed the highest priority projects for the country. There has been progress in restructuring the national oil and gas companies and the beginning of a rational legal framework has been put in place. Turkmenistan needs to continue this process and, as a matter of policy, should seek to optimize its investments (oil, gas, petrochemicals, power, etc.) on the basis of regional supply and demand. With regional cooperation, Turkmenistan, and other countries in the

region, can avoid duplicate investments in the name of self sufficiency. The extent to which this is being done is not known. Regional cooperation will also be needed for exports of oil and gas through common pipelines and for solving environmental problems.

## **2.2 OIL AND GAS LEGISLATION**

The Oil and Gas Legislation prescribe the framework of the government's authority in the sector and are concise and operative in a form that (i) are acceptable to the Parliament, who will enact it, and the government, who will implement it, and (ii) adopts international oil and gas industry practices and standards.

With the enactment of laws and decrees over the past year, Turkmenistan has taken a positive step towards a rational framework for the development of petroleum resources. The new Petroleum Law is comprehensive even though it is too detailed in some respects (such as tendering procedure) and does not provide enough details in other important respects (regulations). The Petroleum Law and the model agreements, conform substantially to international standards. The designation of the Competent Body as the single agency for licensing, negotiations, and control of oil and gas contracts was appropriate but the Law left its place in the Governmental structure undefined. The June 6, 1997 Presidential Decree created the Competent Body and placed it directly under the control of the President bypassing the Cabinet of Ministers contrary to the intent of the Law. The requirement of unanimous approval of the contracts by the Expert Council is aimed at reaching consensus among interested ministries and organizations and the limited (30 day) time allowed for review by the State entities should prevent delays in decision making. It is important that Turkmenistan take steps to educate the involved State agencies about the Petroleum Law, relevant Presidential Decrees, and model agreements and clarify their roles and responsibilities in implementing the new legislative framework.

## **2.3 OIL AND GAS RULES AND REGULATIONS**

The Oil and Gas Rules and Regulations are preferably adopted and enforced by an independent oil and gas regulatory agency (OGRA) and cover the mechanics for the management of operations in the oil and gas sector. The rules and regulations are very specific with regards to oil and gas sector procedure, but still have the great virtue of flexibility, since the OGRA is empowered with a transparent methodology to adjust to changing circumstances and re-issue rules and regulations to account for changing circumstances.

While the Petroleum Law and the June 6, 1996 Decree are very detailed about the procedures for licensing, negotiating, and control functions of the Competent Body, the entire area of regulations has been left unclear. Apparently, no single organization has been designated

for writing, adopting, monitoring compliance, and enforcement of regulations. The current situation is that:

- ▶ The Petroleum Law authorizes the Competent Body, under delegation by the Cabinet of Ministers, to set uniform rules for the development of petroleum fields in compliance with uniform standards of international practice for the conduct of petroleum operations. In this effort, they receive description, criteria, and directives for uniform rules for the development of petroleum fields and their protection from the Ministry of Oil and Gas Industry and Mineral Resources (June 6, 1997 Decree). The Competent Body is expected to bring the uniform rules into compliance with international standards.
- ▶ The current organization of the Competent Body does not have a separate department dealing specifically with regulations. The June 6, 1997 Decree, which establishes and gives form to the Competent Body, while acknowledging that rule making is a "function" of the Competent Body, fails then to fashion an arm or department of the Competent Body to actually follow through on this obligation.
- ▶ From the new Petroleum Law, potential areas of regulation can be identified. These are licensing and permitting, uniform rules for field development, tenders, unitization, offshore structures, disposal of waste, protection of subsurface resources, environmental protection, measurement of petroleum, insurance, data collection, etc.
- ▶ There is a great need to write new regulations, update old regulations to international standards, and devise modern procedures and institutions for monitoring compliance and enforcement. Also needed are procedures for periodic review of regulations and an independent dispute resolution mechanism. For this purpose, Turkmenistan should consider adoption of a separate oil and gas regulatory agency (OGRA) which would function as a professional state body of the Government. The responsibilities of the OGRA would be:
  - ▶ Adoption and enforcement of rules and regulations for petroleum operations, prescribed under the framework of laws enacted by the Government of Turkmenistan, Presidential Decrees, and the Madzhlis.
  - ▶ Conservation and management of natural resources.
  - ▶ Environmental Protection.
  - ▶ Issuance of licenses and operating permits to contractors and collection of licensing and permitting fees.
  - ▶ Regulation of pipeline construction, operations, maintenance, and tariffs.
  - ▶ Maintenance of oil and gas field operations records.
  - ▶ Adjudication of disputes.

Turkmenistan should also consider an administrative procedures law to govern prospective agency actions relating to rule-making, licensing, and adjudicatory hearings. The governmental agencies of Turkmenistan currently lack transparent procedures by which they conduct their business. Open and predictable processes are an incentive to investment.

In the long run, it is desirable that the OGRA be independent and function as an autonomous and non-political body and not report to any administrative, parliamentary, or judicial branch of the Government. However, this may not be possible without an independent administrative or judicial machinery capable of resolving disputes. In the interim, OGRA should be constituted as a department of the Competent Body. Alternatively, it could report to Ministry of Oil and Gas as in some countries.

#### **2.4 NATIONAL OIL COMPANY**

The National Oil Company's (NOC) role is to carry out exploitation of oil and gas resources on behalf of the State. The NOCs evolved from the need to control, protect, and develop indigenous capability to exploit an important national resource. In many countries, the NOC is assigned exclusive authority to exploit oil and gas reserves. They operate oil and gas fields on their own behalf as any oil company would. Where NOCs lack the necessary technology and risk capital, they have been authorized to enter into contracts with foreign oil companies. Today, production sharing is the most common form of contract. NOCs are responsible for managing the contracts with the foreign oil companies. Both Indonesia, which pioneered this concept, and Malaysia have used this arrangement for over 25 years to successfully attract significant foreign investment in their oil and gas sector. As a result, the NOCs in these countries have developed into sophisticated and technically competent oil companies which are venturing out in the international arena.

The new Petroleum Law and the Presidential Decrees passed over the past year have fragmented the national oil company into Turkmenneft (oil), Turkmengas (gas), and Turkmengeologiya (exploration), Turkmenneftgasstroi (construction), and Turkmenneftgas (refining, Marketing, and export). The current structure of the upstream State Concerns, if it endures, offers several advantages. The previous structure, essentially all petroleum sector activities reporting to the Ministry of Oil & Gas, was apparently not achieving its targets. The new structure forces the Concerns to focus on their respective core activities of exploration, development, and production of oil and gas fields and to be held accountable for them. There is some geological and geographical basis for the separation of oil and gas activities. While the oil is more prevalent in the west and the Caspian Sea, the rest of the country is more gas prone.

The new structure also allows service providers Turkmenneftgasstroi (construction) and Turkmengeologiya (primarily geological and geophysics data collection) to specialize in

their fields. Turkmenistan should also consider combining drilling function in the three State Concern (and perhaps other service functions) in separate concerns. These service concerns would then focus their efforts in streamlining their operations, upgrading their equipment and technology, and improving their competitiveness and financial viability, perhaps through joint venture with foreign entities. They should aspire in the medium term to become a regional competitor for their services and to increase market share as the level of exploration activity in Turkmenistan and the neighboring countries rises. As technical and financial viability of the service concerns improves, they could be the first candidates for privatization.

On the other hand, due to separation, the Turkmenneft and Turkmengas have been weakened, technically, organizationally and financially and they are unlikely to take advantage of synergy between oil and gas activities and technologies. Dividing the activity of exploring for and producing oil from the activity of exploring for and producing gas unduly fragments the State's effort to achieve a sound, commercially viable national oil company. In a prolific oil and gas province such as Turkmenistan, the Concerns are bound to discover both oil and gas, in some instances in the same well, and keeping their operations separate would be difficult. It is not known how the Concerns have been performing since the breakup and if there have been significant improvements in their operations as the June 6, 1996 Presidential Decree intended. However, for the long run, Turkmenistan should consider reconsolidating the three upstream companies into a single NOC and streamlining it. Turkmenistan should also consider assigning it the exclusive authority to explore and produce hydrocarbons and, in discharging that responsibility, to negotiate and enter into exploration and/or production contracts with foreign oil companies when capital and technology are needed. It should be noted that NOCs are repositories of indigenous technology and know how and, therefore, they are best suited to manage foreign contractor relations. This is the model followed by Indonesia and Malaysia successfully for over 25 years. At a future date, when the timing is right, the NOC could be privatized into one or more companies depending upon the size and the scope of its operation. As discussed before, Turkmenistan should also separate and modernize its pipeline operating entities.

## **2.5 OIL AND GAS CONTRACTS AND AGREEMENTS**

The oil and gas contracts and agreements envisaged in the new Petroleum Law and the model agreements do not need any changes at this time. The agreements are based on production sharing concepts and were developed during negotiations with foreign oil companies. They are progressive and substantially meet international standards.

## **2.6 USAID'S TECHNICAL ASSISTANCE AND TRAINING PROJECT**

To assist the Turkmenistan government in legal and regulatory reform in the oil and gas sector, USAID has proposed a Memorandum of Understanding (MOU). The Annex 1 of the MOU includes a list of projects and training programs that USAID would undertake over the next one year. These activities include drafting potential implementing rules and regulations, legislation or decrees, or evaluating and revising such legislation or regulations originally proposed by Turkmenistan or foreign specialists. In addition, USAID will provide experts in appropriate fields to complete specific studies or projects in the oil and gas sector. Projects will also include assistance with pipeline tariff methodology, preliminary preparation for tendering onshore and offshore areas for exploration, and guidelines for negotiating production sharing contracts.

Further, USAID will provide in-country training of professional nature by internationally recognized experts, both from industry and institutions of higher learning. The training would concentrate on legal and economic issues in the oil and gas industry of Turkmenistan as it relates to world markets and other areas of local energy sector. The training would be provided to a broad range of Turkmenistan specialists, with participation solicited from Government Ministries, Agencies, Committees, Commissions, NOCs, Universities, NGOs, and private entities as appropriate. USAID's technical assistance and training would be coordinated by two Resident Advisors assigned to the Competent Body.

The MOU does not specifically include assistance with respect to organizational issues identified above. The work on organizational issues would be undertaken only if requested and mutually agreed with the Government of Turkmenistan. However, all the individual activities included in the MOU promote legal and institutional reform in the oil and gas sector, develop indigenous capabilities, and improve the ability of the Government to attract and manage foreign investment for the benefit of the country.

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## CHAPTER 3

### RECOMMENDED CHANGES IN STRUCTURE OF OIL AND GAS SECTOR

A new structure for the oil and gas sector in Turkmenistan is proposed based on the above discussions of the current status of the laws, regulations, process, and institutions and ideal framework for enhancing oil and gas investment. It should be noted that these recommendations are based solely on the study of Turkmenistan laws and decrees, published information, and informal discussions. It has not been possible to discuss and resolve important issues because of lack of access to the Government officials, and to the reports and studies on the oil and gas sector that are held in strictest confidence. Nevertheless, it is clear that despite significant progress in legal reforms to date, further changes are needed to rationalize the organization of the oil and gas sector and to develop indigenous capability to manage its resources. The recommendations are presented for the same five levels of legal structure discussed above. They also describe how USAID's specific technical assistance and training activities which are included in the MOU can help support these changes.

#### 3.1 OIL AND GAS POLICIES

*Turkmenistan should prepare or update its long range strategic plan for the development of oil and gas sector. The initial emphasis should be on investments which take advantage of the regional supply/ demand imbalance to maximize revenues or minimize investments. It is also important to maximize its gas exports through existing pipeline network (Russia) and through Iran. For the long run, alternative oil and gas pipelines with adequate capacity are needed to attract foreign investment and spur exploration and development of oil and gas resources.*

Under its MOU, USAID proposes to provide the Turkmenistan Government two Resident Advisors who, if requested, could provide assistance in updating Turkmenistan's strategic plan. Strategic Planning and International Petroleum Economics training courses are proposed to reinforce strategic thinking in a broad range of officials, both in the Government ministries, agencies, and State Concerns.

#### 3.2 OIL AND GAS LEGISLATION

*The new Petroleum Law, Presidential Decrees, and the model production sharing and joint venture agreements promulgated over the past one year have created a rational legal framework which substantially meets international standards. No changes to this framework, other than adopting implementing rules and regulations (see below), are*

*proposed until deficiencies are identified through actual experience. However, Turkmenistan should take steps to educate the involved State agencies and clarify their roles and responsibilities in implementing the new legislative framework.*

### 3.3 OIL AND GAS RULES AND REGULATIONS

*Turkmenistan should immediately create an Oil and Gas Regulatory agency or department (OGRA) within the Competent Body. The OGRA should be managed by a Board of selected individuals, who by demonstrated ability, background, training, or experience are qualified to assess fairly the needs and concerns of all interested parties in the petroleum sector. The OGRA should be staffed with persons knowledgeable in oil field practices. Considerations should be given to granting a measure of independence as conditions warrant. Turkmenistan should also consider an administrative procedures law to govern prospective agency actions relating to rule-making, licensing, and adjudicatory hearings. Also needed are procedures for periodic review of regulations and an independent dispute resolution mechanism.*

*Once established, the OGRA should begin to write new regulations, update old regulations to international standards, devise modern procedures for monitoring compliance and undertaking enforcement.*

Perhaps, the most important aspect of USAID's technical assistance project is reviewing and commenting on existing and proposed regulations and standards, and recommending changes and additions to attain compliance with international standards. It would involve assembling a library of model regulations from authorities such as the American Petroleum Institute, Indonesia, and the United Kingdom. Using these international standards, development for the consideration, deliberation, and debate of the Competent Body, additional regulations to provide a substantive fulfillment for the new Petroleum Law. The regulation could include, among others:

- ▶ Procedures and obligations relating to exploration, production, and combination licenses.
- ▶ Rules for the protection of petroleum resources.
- ▶ Rules for the protection of the environment.
- ▶ Rules for public life and health protection.
- ▶ Rules for the identification and protection of Holy sites, and historical and cultural monuments.
- ▶ Rules for registration of contracts.
- ▶ Rules for revocation of licenses.
- ▶ Rules regarding bank guarantees or substitute.
- ▶ Rules concerning the timing and procedures for holding a tender.
- ▶ Rules concerning submission of bidding proposals.

- ▶ Rules regarding license validity periods, as well as the suspension, revocation, and termination thereof. Rules concerning submission of bidding proposals.
- ▶ Rules regarding the substance and approval process of voluntary and forced unitization.
- ▶ Rules regarding the location, construction, operation, use and the ultimate dismantling of structures placed in navigable waters.
- ▶ Rules regarding the discharge and burial of wastes from petroleum operations, including the setting of permissible levels of impurity.
- ▶ Rules concerning the measurement and weighing of petroleum, including the frequency and methods.
- ▶ Rules concerning the protection of natural resources, and the conduct of spill clean-up operations.
- ▶ Rules concerning the reclamation of land utilized for petroleum operations.
- ▶ Rules concerning the laying and operation of submarine pipelines and cables.
- ▶ Rules regarding the content, and submission requirements relating to an environmental protection plan.

No specific activity is planned at this time to promote an independent OGRA. However, USAID's projects includes a training course on Energy Regulatory Administrative Agency Law to heighten the need for systematic agency actions relating to rule-making, licensing, and adjudicatory hearings.

### 3.4 NATIONAL OIL COMPANY

*Turkmenistan should consider consolidating and streamlining the three upstream oil and gas State Concerns Turkmenneft, Turkmengas, and Turkmengeologiya into one state owned Turkmen National Oil Company (TNOC). The process would include consolidating oil service functions such as drilling into separate entities and privatizing them. TNOC should be given exclusive authority to explore and produce hydrocarbons in all of Turkmenistan. TNOC would operate currently producing areas on its own or in joint venture with foreign oil companies. The foreign oil companies would enter into production sharing contracts with TNOC to explore in rest of the country. As TNOC matures as an oil company, consideration should be given to privatizing it into one or more self sustaining oil and gas companies.*

*Turkmenistan should also consolidate oil and gas pipeline operations into one or more manageable entities and streamline their organizations. Reforms should be introduced to bring accounting practices to international standards and an objective and transparent cost based tariff methodology should be implemented.*

To separate policy setting and regulatory functions of the government (OGRA) from commercial ones, the role of the Competent Body's should be limited to tendering, contract

negotiations, signing of contracts, and control of implementation. Initially, the Competent Body could continue to report as now. Eventually, these functions could be transferred to the TNOC.

USAID's project does not directly include assistance with respect to organizational issues identified in above recommendations. The work on organizational areas would be undertaken only if requested and mutually agreed with the Government of Turkmenistan. The project does include reviewing and analyzing the existing pipeline cost accounting as well as the pipeline tariff methodology. Standardized computer models will be provided to Turkmenistan Government with the objectives of evaluating the financial and economic feasibility of pipelines, developing pipeline tariff methodology, and estimating actual pipeline tariffs based on international standards. Training to concerned personnel on the use of the above computer models is also contemplated. USAID's project also includes training courses on Oil and Gas Accounting and Oil and Gas Project Financing to assist in this effort.

### **3.5 OIL AND GAS CONTRACTS AND AGREEMENTS**

*The oil and gas contracts and agreements envisaged in the new Petroleum Law and the model agreements do not need any changes at this time. Changes should be considered only after Turkmenistan has gained experience in their use in negotiating contracts.*

Under the USAID's project, the Resident Advisors will work with the Competent Body to develop negotiating guidelines and evaluate specific economic and legal issues as they arise. USAID's Project include a course on Petroleum Investment Agreements to reinforce understanding of key issues in international oil and gas exploration and production agreements.

### **3.6 REGIONAL COOPERATION WITHIN THE CENTRAL ASIAN REPUBLICS**

*USAID's resident advisors in Turkmenistan should place emphasis on developing a complementary legal and regulatory climate within the entire region.*

USAID had already provided assistance to the Government of Kazakhstan in legal and regulatory reform in the oil and gas sector. In this context, the Turkmenistan resident advisors will evaluate the need and the capability to design similar oil and gas rules and regulations and pipeline tariff methodologies which will complement the Central Asian Republic regional investment environment.