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**REFERENCE MATERIALS AND EQUIPMENT  
KAZAKHSTAN IDENTIFICATION AND PROCUREMENT**

**NIS Institutional Based Services Under the  
Energy Efficiency and Market Reform Project  
Contract No CCN-Q-00-93-00152-00**

**Delivery Order No 17  
Central Asian Republics  
Regional Energy Sector Initiative**

*Final Report*

*Prepared for*

U S Agency for International Development  
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**CHAPTER 1**  
**IDENTIFICATION OF GOVERNMENT COUNTERPARTS**

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## CHAPTER 1

### IDENTIFICATION OF GOVERNMENT COUNTERPARTS

Within the framework of DO #17, Hagler Bailly has been closely working with a number of government agencies, ministries, and state owned companies with the objective to achieve private investment in an environmentally sound, regionally efficient, market-oriented energy sector. The desired result of this initiative is to create a legal and regulatory environment conducive to private investment in oil and gas. The existing legal and regulatory framework that governs many oil and gas operations in Kazakhstan is still based upon the laws and regulations of the former Soviet Union (FSU). Many of these laws, rules, and regulations do not conform with international standards and practices. The process of the legal and regulatory reform in the Kazakhstan energy sector requires introduction and implementation of new concepts, methodologies, and terminology, which can be supported by a number of reading materials, reference books, office equipment and software programs.

The specific projects, that Hagler Bailly has been focusing on in Kazakhstan, are as follows: creation of a cost of service rate of return oil pipeline tariff methodology, drafting of five oil and gas rules and regulations, drafting a prospectus for an Aral Sea oil and gas consortium and an international agreement between the Governments of Kazakhstan and Uzbekistan, and recommendations for the establishment of an independent oil and gas regulatory agency.

The following local counterparts have been actively involved in the work on these projects:

- 1 Agency for Strategic Planning and Reforms**
- 2 Committee for Emergency Situations**
- 3 Committee for Regulating Natural Monopolies and Protection of Competition**
- 4 KazakhOil**
- 5 Kazakhstan Caspi Shelf (KCS)**
- 6 KazTransOil (KTO)**
- 7 Ministry of Energy, Industry and Trade (MEIT)**
- 8 Ministry of Ecology and Natural Resources (MENR)**

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#### **1.1 Agency for Strategic Planning and Reforms**

The Agency was established by a Presidential Decree dated October 10, 1997 "On Actions for Further Increasing the Efficiency of State Administration in the Republic of Kazakhstan,"

Resolution of the Government of the Republic of Kazakhstan dated November 12, 1997  
"Issues of the Agency for Strategic Planning and Reforms," Regulations on the Agency for  
Strategic Planning and Reforms of the Republic of Kazakhstan

The main functions of the Agency include

- analysis and forecasting of the development of the economy of Kazakhstan,
- coordination of the elaboration and control over execution of strategic plans for development of the country,
- planning and coordination in the field of attracting and utilizing official support for the development of Kazakhstan,
- identification of strategic investment priorities,
- carrying out technical and economic assessment and establishing an economic model for subsoil use contracts,
- registration of applications for patents, organization of State examination of application and issuing patent protection documents,
- providing informational support for the activities of State administration agencies

## **1 2 Committee of the Republic of Kazakhstan for Emergency Situations**

The Committee for Emergency Situations was created on the basis of the former commission for emergencies under the Government of the Republic of Kazakhstan. The Committee was subject to several structural reorganizations during the period of 1996-1997. Currently it consists of the following departments: department for prevention of emergency situations, department for emergency response, department for state supervision over emergency situation, safe conduct of industrial operations and mining supervision, and department of civil defense and military units. Hagler Bailly worked closely with the department for state supervision over emergency situation, safe conduct of industrial operations and mining supervision within the Working Group on development of the offshore petroleum regulations for the Republic of Kazakhstan. This department is called to insure abidance of all industrial companies by safety rules and regulations enforced in the Republic of Kazakhstan. State inspectors of the Committee are empowered to suspend any industrial operation that is not in compliance with the project design and safety regulations or may cause emergency situation, and they have an authority to impose penalties and other sanctions on any company, conducting industrial operation on the territory of the Republic of Kazakhstan irrespective of the type of ownership, agency affiliation or jurisdiction of incorporation.

## **1 3 Committee for Regulation of Natural Monopolies and Protection of Competition**

The Committee for Regulation of Natural Monopolies and Protection of Competition formerly the Committee for the Antimonopoly and Pricing Policy, which used to be a part of the Agency for Strategic Planning and Reforms, then it was a part of the Ministry of Energy,

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Industry and Trade) was established by Presidential Decree "On Further Measures for Optimization of State Administration" dated June 30, 1998. The Committee controls the implementation of antimonopoly law, it is also responsible for controlling consumers' rights. The Committee is responsible for regulating the prices and tariffs of the products and services, provided by the legal entities-natural monopolies in all sectors of the Kazakhstan economy. This includes "KazTransOil" national oil pipeline transportation company, "KazakhOil" national oil company, "KazakhTelecom," and other natural monopolies.

#### **1.4 KazakhOil**

"KazakhOil" is the national oil company, responsible for the management of the state-owned assets in all the oil joint stock companies, with the government share, operating on the territory of Kazakhstan. KazakhOil represents the GOK in negotiations with outside organizations that implement exploration, production, transportation, and refining operations. The company participated in organizing tenders for the exploration and production of oil and gas (including the Caspian and Aral Sea offshore areas), preparing and implementing new projects, and privatizing the oil and gas industry. KazakhOil is also responsible for processing and refining production received in the form of royalties and other special payments, as well as organizing the marketing and sale of refined products. The company is responsible for managing the GOK portfolio of shares in oil production and refining enterprises and equity interests of joint ventures and production sharing agreements.

#### **1.5 KazakhstanCaspianShelf JSC**

KazakhstanCaspianShelf JSC was founded at the beginning of 1993 in the frameworks of the state program for development of the Kazakhstan subsea oil and gas reserves. The first stage of its activities included the research of the Kazakhstan Caspian Shelf. The research works have been completed in 1997. At the present moment, KCS (90% KazakhOil owned company) owns 1/7 in the OKIOC (Offshore Kazakhstan International Operating Company), which was formed by the participants of the North Caspian Project - KCS and seven international oil companies - Agip Caspian Sea B V, British Gas International, BP-StatOil, Mobil, Shell, and Total in November 1997. The main aim for this establishment was to progress exploration in the north of the Caspian Sea under the terms of the PSA, with the term of 40 years.

#### **1.6 KazTransOil (KTO)**

KazTransOil national oil pipeline company was formed in March 1997, by the Presidential Decree. Its main function is to efficiently operate the pipeline system of the Republic of Kazakhstan and to provide efficient and reliable services to the oil producing companies-shippers for shipping oil within the territory of Kazakhstan and exporting it out of the

Kazakhstan territory Kazakhstan's oil transportation system comprises more than 6,000 kilometers of crude oil pipelines and 1,000 kilometers of oil product pipelines The three major oil pipeline divisions are operated by KazTransOil Easter, Western and Aktyubinsk

#### **1 7 Ministry of Energy, Industry and Trade (MEIT)**

The Ministry was restructured on two different occasions last year (in March and in October) in an effort to consolidate authority, streamline activities, and reduce expenditures Until 1997 there was a Ministry of Energy and Coal Industries and a separate Ministry of Oil and Gas in the Republic of Kazakhstan Then, in March of 1997 the Ministry was converted into the Ministry of Energy and Natural Resources as a result of the merger of the Ministry of Energy and Coal Industry, Ministry of Oil and Gas Industry and Ministry of Geology The Ministry with current administrative structure was established in October, 1997 The Ministry of Energy, Industry and Trade was created to administer policy-making and monitor activities in the power sector and oil and gas sector, along with the other responsibilities for monitoring other industries and trade

#### **1 8 Ministry of Ecology and Natural Resources (MENR)**

The Ministry with current administrative structure was established at the end of 1997 as a result of the merger of two ministries The Ministry of Ecology and the former Ministry of Geology The Ministry monitors the implementation of the laws and requirements on environment protection and mineral resources and is given control of environmental and subsoil concerns The Ministry is responsible for the GOK policy for the environmental protection It is also responsible for the state ecological expertise over the environmental protection Its Ecology Committee monitors state and regional ecology programs and plans, it also monitors implementation of the requirements for environmental protection Its Geologic and Resources Protection Committee monitors the rational use and protection of mineral resources

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**Attachment 1** illustrates participation of the GOK agencies, Hagler Bailly counterparts in the above mentioned projects Hagler Bailly has been cooperating with the GOK counterparts on an individual basis, and also in a working group set up In the course of the work on the Oil Pipeline tariff Methodology Project, a Steering Committee was formed to address the pertinent issues and to discuss the optimum solutions The Steering Committee was chaired by the representatives of KazTransOil jointly with Hagler Bailly consultants, and included representatives of KazakhOil, former Ministry of Economy, former Anti-Monopoly Committee, Ministry of Energy, Industry and Trade, and representatives of the Kazakhstan Petroleum Association, such as TengizChevroil, Mobil, British Gas and other companies A Working Group was formed for the development of the offshore oil and gas regulations, which included Hagler Bailly Consultants, representatives of the Ministry of Energy,

Industry and Trade, the Ministry of Ecology and Natural Resources, KCS and members of the Kazakhstan Petroleum Association, such as Shell, Agip, Mobil, Exxon and others

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**CHAPTER 2**  
**DISCUSSION OF REFERENCE MATERIALS AND**  
**EQUIPMENT NEEDS**

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**CHAPTER 2**  
**DISCUSSION OF REFERENCE MATERIALS AND EQUIPMENT NEEDS**

In the process of the project implementation, HBIX consultants identified a number of areas that require clarification, understanding of market economy concepts, and acceptance of international standards and practices. These areas as well as required equipment and software are enlisted in **Attachment 2** taking into account the needs of specific Kazakhstan agencies.

**In compliance with the Implementation Plan of Delivery Order# 17, the total amount of funds available for the procurement of reference materials and items of equipment for Kazakhstan is \$ 30,000**

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**CHAPTER 3**  
**RECOMMENDED REFERENCE MATERIALS TO BE PROCURED**

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## CHAPTER 3

### RECOMMENDED REFERENCE MATERIALS TO BE PROCURED

In compliance with the identified needs, the following procurement items in the form of specific reading materials, reference books, and periodicals are recommended for the use by the local counterparts. These items would assist them in familiarizing themselves with the important financial, economic, technical, and legal and regulatory western concepts, that are conducive for the reform process in the energy sector of Kazakhstan. The reference materials are subdivided under the specific categories below.

#### **Financial Management (IRR, NPV, DCF, Equity/Debt financing)**

1 The Financial Analyst's Tool Kit Oil Company Financial Analysis Software, by Daniel Johnson & Co \$295 00

2 Oil Company Financial Management in Non Technical Language, Daniel Johnson & James Bush (ISBN 0-87814-597-4) \$64 95

3 Management of Company Finance, J M Samuels, F M Wilkes and R E Brayshaw, by Chapman & Hall

#### **Accounting Standards**

1 Oil & Gas Taxation in Nontechnical Language, Burke and Starcher (ISBN 0-87814-397-1) \$25 00

#### **Petroleum Economics**

1 Where's the Shortage? A Nontechnical Guide to Petroleum Economics, by Tippee (1993)

2 CEI HELP PLUS! Collarinn Engineering Inc (Software o Petroleum Economics)

#### **Western Regulatory Practices**

1 Regulation to Drilling and Well Activities and Geological Data Collection in the Petroleum Activities/Norway

2 Amendments to and corrections in Norwegian Petroleum Directorates Regulation - annual update, 1997

3 Petroleum (submerged lands), (management of safety offshore facilities) Regulations

4 Act Relating to Petroleum Activities/Norway

5 Petroleum (submerged lands Act 1967 - Schedule 7/Commonwealth Consolidated Acts

6 Australia Offshore Minerals Act 1994

7 Hibernia Management Development Company Ltd, HSE Guide

8 Canada Oil and Gas Operation Act

9 Canada Petroleum Resources Act

10 Canada Newfoundland and Atlantic Accords Implementation Act

11 Canada - Newfoundland Offshore Petroleum Board/Annual Report 1996-1997

12 Canada - Nova Scotia Offshore Petroleum Board/CNSOPB Consolidate Guideline Package, 1996

13 Canada - Nova Scotia Offshore Petroleum Board/CNSOPB Consolidate Guideline Package (Federal Version), 1996

14 Canada - Nova Scotia Offshore Petroleum Board/Annual Report 1996-1997

15 Code of Federal Regulations/Mineral Resources, volume 30, parts 200 to 699, revised as of July 1, 1996

16 Rules and Regulations, Rules of Practice and Procedure, and Oil and Gas Conservation Act (As Amended), Department of Natural Resources Oil and Gas Conservation Commission of the State of Colorado, Revised June, 1996

### **Strategic Planning**

1 U S Petroleum Strategies in decade of the environment, Bob Williams, (ISBN 0-87814-365-3) \$15 00

2 Strategies and Action Plans, Robert Megill (ISBN 0-87814-286-X) \$15 00, Republished under title Long Range Exploration Planning

3 Strategic Planning For Public and Non-Profit Organizations, Bryson

**Environmental Compliance**

1 Environmentally Safe Drilling Practices, Armando Navarro  
(ISBN 0-87814-437-4)

2 Oil & Gas Field Waste Regulation Handbook, Michelle Mcfaddin (ISBN 0-87414-461-7)

3 Environmental Law Simplified A Practical Guide for Oil and Gas Operation, Butler & Binion (ISBN 0-87814-351-3)

4 Hazardous Waste Laws, Regulations and Taxes for the US Petroleum Refining Industry - An Overview, David E Fenster (ISBN 0-87814-351-3)

5 Glossary of Environmental and Regulatory Terms Phrases, Dick James and W J James,  
(ISBN 0-87814-409-9) \$15 00

6 Oil Spill Prevention and Response How to comply with OPA and OSPRA, Leslie Ray  
(ISBN 0-87814-389-0) \$69 95

7 Angola - 1997/Environmental Law and Policy Service/By Petroconsultants

**Technical and Safety Requirements**

1 Practical Well Planning Drilling Manual \$89 95

2 Safety and Working Environment in the Offshore Petroleum Industry/A Guide to the Understanding of the Safety Regime/Norway

3 International Offshore Safety Regulations UK, Norway, Australia and Canada

4 Tailor Energy Company/Safe Drilling ans Workover Practices Manual/Prepared by Paragon Engineering Services, Inc , Houston

5 Marine Geophysical Operations/Safety Manual, International Association of Geophysical Contractors, Seventh Edition, 1991

6 Italian Offshore Safety Rules, S Donato Milanese, September 1993

7 Mexican Laws and Regulations Governing Occupational Safety and Health, A Selection of Principal Documents, OSHA U S Department of Labor, 1993

8 OSHA Technical Manual

**Management of International Oil Operations**

1 The Management of International Oil Operations, by Richard Barry (1993) \$74 95

**International Petroleum Contracts**

World Petroleum Arrangements, 1993, Volume I, Barrows, New-York

**World Markets and Prices/Quality Banks**

1 Oil Markets and Prices the Brent Market and the Formation of World Oil Prices, by Horsnell and Marbo, (1993) \$69 95

2 Oil and gas magazine

**Institutional Development**

1 Oil and gas magazine

**Dictionaries, Glossaries, Terminology Guidebooks**

1 Dictionary of Petroleum Exploration, Drilling & Production, by Norman Hyne (1991) \$ 110 95

2 Glossary of Environmental and Regulatory Terms Phrases, Dick James and W J James, (ISBN 0-87814-409-9) \$15 00

**In accordance with the Implementation Plan of the Delivery Order #17, the subtotal amount, available for the reference materials and selected texts in legal, regulatory, business and technical subjects, constitutes \$7,500**

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**CHAPTER 4**  
**RECOMMENDED ITEMS OF EQUIPMENT TO BE PROCURED**

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## CHAPTER 4

### RECOMMENDED ITEMS OF EQUIPMENT TO BE PROCURED

The procurement of computers is recommended for the Committee for Regulation of Natural Monopolies and Protection of Competition. This is quite important, since the Committee is one of the key agencies of Kazakhstan, actively performing economic and regulatory reforms. The committee reports directly to the President of the Republic of Kazakhstan and fulfills the functions of a regulatory agency. The Committee lacks decent computer equipment and has no access to the Internet data. The equipment and software requirements are demonstrated in Attachment 2. In addition, recently, the Committee for Regulation of Natural Monopolies and Protection of Competition sent a request to the USAID to provide assistance to the Committee in the form of procuring computers, modems and software.

**In accordance with the Procurement Items of the Implementation Plan of DO #17, the subtotal amount, available for the personal computer, accessories and other office equipment constitutes \$ 7,500, and the subtotal amount, available for the software programs is equal to \$15,000, which include**

- Accounting/Budgeting For Pipeline Operations and Tariffs,
- Economic Evaluation of Pipeline Projects,
- Russian - English - Russian Software

**Attachment 2** illustrates the needs of the specific software programs by the particular GOK agencies, which are actively involved in the energy sector reform.

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**CHAPTER 5**  
**ACTION PLAN**

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## CHAPTER 5 ACTION PLAN

Obviously, it will not be possible to meet all the needs of all the above mentioned agencies and to provide them with all the procurement items, listed in the report due to the limitation of funds, available for this initiative. It will be important to prioritize the needs jointly with the Kazakhstani counterparts and to allocate the funds, available for the Kazakhstani counterparts in compliance with the identified priorities. Some of the reference materials will need to be translated from English into Russian. Ultimately, the required items will be procured and delivered to the counterparts, which will serve to facilitate their work, will enhance their understanding of the western standards and practices, and thus, will accelerate some of the reforms in the energy sector of Kazakhstan.

**We recommend that \$30,000 is spent immediately on the procurement items and computer equipment listed above.**

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## ATTACHMENTS

<b>Attachment 1</b>	<b>Counterparts</b>
<b>Attachment 2</b>	<b>Procurement Items</b>

**Counterparts**

Attachment 1								
Kazakhstan Counterparts Involvement in Energy Legal and Regulatory Reform Projects	Agency for Strategic Planning	Committee for Emergency Situations	Committee for Regulating Natural Monopolies	KazTransOil	KazakhOil	KCS	MEIT	MENR
<b>Major Projects</b>								
I Oil Pipeline Tariff Methodology	x		x	x	x		x	
II Offshore Rules and Regulations		x			x	x	x	x
III Oil and Gas Independent Regulatory Agency (OGRA)	x	x	x	x	x	x	x	x
Note KCS - Kazakhstan Caspi Shelf MEIT - Ministry of Energy, Industry and Trade MENR - Ministry of Environment and Natural Resources								

Procurement Items

<b>Attachment 2 Identified Needs in Reference Materials, Items of Equipment, and Software</b>	Agency for Strategic Planning	Committee for Emergency Situations	Committee for Regulating Natural Monopolies	KTO	KazakhOil	KCS	MEIT	MENR
Financial Management (IRR, NPV, DCF, Equity/Debt financing)			x	x	x		x	
Accounting Standards			x	x				
Petroleum Economics	x		x	x	x	x	x	
Western Regulatory Practices	x		x	x	x	x	x	x
Quality Banks			x	x	x	x	x	
Strategic Planning	x	x	x	x	x	x	x	x
Institutional Development	x		x	x	x		x	x
Environmental Compliance	x	x	x	x	x	x	x	x
World Markets and Prices	x		x	x	x	x	x	x
Technical and Safety Requirements		x		x	x	x	x	x
Management of International Oil Operations	x		x	x	x	x	x	x
Oil Spill Prevention and Response		x		x	x	x	x	x
International Petroleum Contracts	x	x	x	x	x	x	x	x
<b>Equipment</b>								
Computers			x					
<b>Software</b>								
Tariff calculations spreadsheets			x	x	x			
Accounting/Budgeting for Pipeline Operations and Tariffs			x	x				
Netback Value Calculation Spreadsheets			x	x	x	x		
Economic Evaluation of Pipeline Projects	x		x	x	x	x		
Russian-English-Russian Software	x	x	x	x	x	x		
Assistance on Internet Access to the World Crude Oil Prices			x	x	x		x	

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