2 POLICY, LEGAL & ADMINISTRATIVE FRAMEWORK

This chapter presents the legislation, standards and guidelines relevant to the Lunskoye seismic survey.

The regulatory instruments, guidelines and industry standards that will be used in this project are:

- Sakhalin Energy policy on Health, Safety and the Environment including related policy and guidance documents;
- relevant international laws and conventions;
- international guidelines for impact assessment, for which the World Bank / IFC guidelines are applied as a benchmark;
- shareholder standards;
- terms and conditions of the development agreement for the Lunskoye oil and gas field from the Production Sharing Agreement between the Government of the Russian Federation and Sakhalin Energy Investment Company Ltd. (SEIC);
- requirements of Russian Federation and Sakhalin Oblast environmental legislation.

2.1 SEIC POLICY ON HEALTH, SAFETY AND THE ENVIRONMENT

The proposed Lunskoye seismic survey is part of the SEIC Sakhalin II project and will be carried out in accordance with SEIC's Health, Safety and Environment (HSE) Policy. A summary of SEIC's Environmental Policy is shown in *Box 2.1*.

Box 2.1 SEIC Environmental Policy

The success of SEIC depends on our ability to continuously improve our operational performance while protecting the natural environment. It is a commitment, which is in the best interests of our customers, our employees, our shareholders and society at large.

As a company SEIC shall:

- *seek external certification of the environmental component of our HSE management systems against a recognised, independent system standard;*
- *seek to prevent pollution and minimise environmental impact from existing and planned activities. This includes identifying environmental hazards and risks and implementing appropriate controls to ensure that the risks are reduced to a level 'as low as reasonably practicable';*
- *recognise the priority of preventing oil and chemical spills, and maintain contingency arrangements in co-operation with the authorities and emergency services to respond responsibly and appropriately to environmental emergencies;*
- *promote a culture of environmental awareness and support environmental training;*
- *discuss environmental matters with our stakeholders, and report our environmental performance both internally and externally;*
- *carry out Environmental Impact Assessments for new projects and significant changes in existing facilities and operations;*
- *contribute to sustainable development and support biodiversity;*
- *use materials and energy efficiently;*
- *report all significant environmental incidents, and take measures to prevent reoccurrence;*
- *in association with industry forums, work with Russian government authorities to help develop environmental policy, regulations and standards and promote best environmental practice in the Russian oil and gas industry;*
- *ensure compliance with relevant environmental laws and regulations, industry codes of practice, and other standards and policies that we may voluntary subscribe to;*
- *set minimum environmental expectations and performance improvement objectives and targets, measure performance, and adjust activities accordingly;*
- *conduct internal and external audits and management review to ensure that appropriate resources are in place to carry out this policy, and ensure that policy objectives are being met;*
- *require our contractors to manage environmental matters in line with this policy.*

Policy information supplied by SEIC (2002).

These policies and practices are supported by a number of environmental, social and health associated SEIC policies including:

- *HSE Commitment and Policy;*
- *Contractor HSE Management Policy;*
- *Key Environmental Requirements;*
- *Biodiversity Policy;*
- *Air Emissions and Flaring policy;*

- *Waste Management Policy;*
- *Sustainable Development Policy.*

HSE Management is made up of Corporate HSE (based in Yuzhno-Sakhalinsk, Sakhalin Island) and Phase II Project HSE (currently based in Rijswijk, Netherlands). The SEIC HSE management systems adopt best practice guidelines and demonstrate that risks (including those to the environment) have been reduced to a level that is as low as is reasonably practicable.

Specialist geophysical contractors using a dedicated seismic survey vessel will carry out the seismic survey. SEIC report that these contractors will be pre-qualified, with industry best practice HSE standards. The contractor will be required to prepare a Crew Environmental Management Plan and to incorporate all mitigation measures identified in this ES into mandatory contract terms. SEIC personnel will be onboard the seismic survey vessel to ensure compliance with the specifications (see *Chapters 7* and *8*).

2.2 INTERNATIONAL LEGISLATION, STANDARDS AND GUIDELINES

This section provides a summary of relevant international and national legislation and industry standards and guidelines relevant to the survey programme.

2.2.1 International Conventions and Treaties

There are a number of international conventions and treaties relevant to the Lunskoye seismic survey. It should be noted that the registration country of the contracted seismic survey vessel may effect the individual conventions and treaties applicable to aspects of the project (see *The Convention on Conditions for Registration of Ships (1986)* in the section below).

Relevant international conventions and treaties (listed in order of the date of adoption) include:

- ***The Convention on the Continental Shelf (1958)*** aims to define and delimit the rights of States to explore and exploit the natural resources of the continental shelf whilst imposing restrictions on activities that may *'cause unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea, or with oceanographic or other scientific research'* (Art. 5).

- ***Convention on the Territorial Sea and the Contiguous Zone (1958)*** describes the sovereignty of a State and its incorporation of territorial waters including the sea and seabed.

- ***International Convention for the Prevention of Pollution of the Sea by Oil (1952) as amended 1962 and 1969*** aims to prevent the discharge of oil to the marine environment. One of the precursor international agreements to MARPOL (see below). The Convention has not been officially superseded by MARPOL, but is fairly outdated with weaker controls, for example, the permissible concentrations of hydrocarbons in effluent discharges is 100 parts per million (ppm) as compared to the 15 ppm control applied by MARPOL.

- ***The Convention for the International Council for the Exploration of the Sea (1964)*** was formed to provide a new constitution for the International Council for the Exploration of the Sea (ICES) established in Copenhagen in 1902. The Council encourages research and investigations in the marine environment.

- ***The International Convention on Civil Liability for Oil Pollution Damage (1969) as amended*** aims to ensure that adequate compensation is available to persons who suffer damage caused by pollution resulting from the escape or discharge of oil from ships. The Convention also standardises the international rules and procedures for determining questions of liability and compensation.

- ***The Convention on Wetlands (Ramsar, Iran, 1971) (the Ramsar Convention),*** Article 3 sets out an obligation to promote protection and rational utilisation of water and wetland resources. It also requires the protection of the littoral zone of the Sea of Okhotsk to a low-tide boundary of six metres offshore.

- ***The International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971)*** aims to supplement the *International Convention on Civil Liability for Oil Pollution Damage (1969*, see above).

- ***The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters (1972) ('The London Convention')*** which covers all seas and all deliberate disposal of wastes other than that incidental to the normal operation of ships. Exceptions are permitted only in the case of force majeure (1) or an extreme emergency.

- ***The Convention Concerning the Protection of Workers Against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration (1977)*** aims to protect workers against occupational hazards in the working environment and applies to all activities except where special problems of a substantial nature exist. The national laws and regulations of the signatory State determine measures, prevention and control.

(1) For example the occurrence of events that are considered to be outside the control of the concerned parties.

- ***The International Convention for the Prevention of Pollution from Ships (MARPOL), 73/78*** (*1973 as amended by the 1978 Protocol*), aims to eliminate the discharge of oil, chemicals and other harmful substances, minimise the accidental discharge of hydrocarbons and improve the prevention and control of marine pollution from ships.

- ***The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (1978) (STCW) as amended***, has the objectives of establishing standards of competence for the performance of tasks and assessing the competence level of personnel. In addition, the 1995 amendments to the Convention establish minimum rest periods for watchkeeping personnel, and require that all mariners receive vessel familiarity and basic safety training. The Convention promotes shipboard practices that prevent human error or detect errors at a point when adverse consequences can be averted.

- ***The Convention on the Conservation of Migratory Species of Wild Animals*** (1979) (the Russian Federation is not a signatory to this Convention) came into force to offer protection to species of wild animals that migrate across national boundaries.

- ***The International Convention on Long Range Transboundary Air Pollution (LRTAP) (1979)*** and the associated Protocols. The Convention and Protocols are aimed towards the gradual reduction of air emissions of polluting substances in a transboundary context.

- ***The United Nations Convention on the Law of the Sea (1982)*** was formed and ratified to introduce a new and comprehensive legal regime for the oceans and seas. The Convention incorporates environmental standards as well as enforcement provisions dealing with pollution of the marine environment and measures to protect marine ecological resources.

- ***The Convention on Conditions for Registration of Ships (1986)*** regulates the nationality of ships and the flag that a ship will sail under. It states that the ship will comply with the laws and regulations of its registered State, *'…in particular, the safety of ships and persons on board and the prevention of pollution of the marine environment'*.

- ***The Montreal Protocol on Substances that Deplete the Ozone Layer (1987)*** was adopted as an international treaty to eliminate the production and consumption of ozone depleting substances (ODS) (*eg* halon for fire fighting systems).

- ***The International Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention, 1991)*** obligates the Parties to assess the environmental impact of certain activities at an early stage of planning, and stipulates the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.

- ***The European Convention on the Protection of Archaeological Heritage (1992)*** aims to: *'…protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study…whether situated on land or under water'.* The Convention also dictates that environmental impact assessments and the resulting decisions involve full consideration of archaeological sites and their settings, and that if possible, provision is made for their conservation *in situ* in the event of discovery (Art. 5).

- ***The United Nations Framework Convention on Climate Change (UNFCCC)(1992)*** and the associated Kyoto Protocol (KP)(1997) seek to minimise the problem of climate change and the associated threats to human and ecological environments through the transfer of technologies, expertise, funds and the introduction of commitments and mechanisms for the reduction of greenhouse gas emissions.

- ***The Convention on Biological Diversity (1992)*** aims to conserve biological diversity and promote the sustainable use of its components. The Convention places an obligation on Parties to provide for environmental impact assessment of projects that are likely to have significant adverse effects on biological diversity.

2.2.2 *International Standards and Guidelines*

Benchmarking Guidelines

The lender community is generally regarded as presenting best practice models for environmental management and protection. For this reason, EIA guidelines used by SEIC as a benchmark include the following:

- World Bank (WB) *Environmental Assessment Sourcebook,* 1999;

- International Finance Corporation (IFC) *Guidance Note B: Content of an Environmental Impact Assessment Report,* 1998 (Environmental and Social Review Procedure, ESRP).

Supporting Standards and Guidelines

Key supporting guidelines are:

- World Bank *Pollution Prevention and Abatement Handbook* 1998;

- *Environmental Assessment Sourcebook 1991* (and updates);

- IFC *Guidelines No 15: Offshore Oil and Gas Developments*.

In addition, the following best practice guidelines have been adopted:

- International Association of Geophysical Contractors (IAGC) *Environmental Manual for Worldwide Geophysical Operations,* 2001;

- Shell's *Technical Guidance for Environmental Assessment*, 1999.

The following standards and guidelines are also relevant to the Lunskoye seismic survey:

- ***Joint Nature Conservation Committee Guidelines for Minimising Acoustic Disturbance to Marine Mammals from Seismic Surveys, (JNCC, 1998)***and the associated *Guidance Note for Minimising Acoustic Disturbance to Marine Mammals from Seismic Surveys*, 2000).

- ***Standards of the International Maritime Organisation (IMO),*** which regulates all technical matters in relation to maritime trade dispositions, for example, matters related to maritime security and the prevention and control of ocean pollution by ships.

- ***The World Conservation Union (IUCN)*** has the main objectives of maintaining and improving ecosystem integrity and reducing the loss of biodiversity within species, between species and within ecosystems. The IUCN produces an inventory of species at risk of extinction, which is often used in the formulation of conservation laws, regulations and guidelines. This inventory is the *IUCN Red List of Threatened Species*. There are seven categories of risk identified by the IUCN. Brief descriptions of the categories are listed below (IUCN, 2001).

    - 'Extinct' is applied to a taxon when there is no reasonable doubt that the last individual has died.

    - 'Extinct in the Wild' is applied to a taxon when it is known to survive in captivity, but thorough surveys have failed to record evidence of any individuals surviving in the wild.

    - 'Critically Endangered' is used to describe a taxon when it is facing an extremely high risk of extinction in the wild in the immediate future as defined by specialist IUCN criteria.

    - 'Endangered' is applied to a taxon when it is not 'Critically Endangered' but is facing a very high risk of extinction in the wild in the near future as defined by specialist IUCN criteria.

    - 'Vulnerable' is used to describe a taxon when it is not 'Critically Endangered' or 'Endangered' but is facing a high risk of extinction in the wild as defined by specialist IUCN criteria.

- 'Near Threatened' is applied to a taxon when it has been evaluated against the criteria but does not qualify for 'Critically Endangered', 'Endangered' or 'Vulnerable' now, but is close to qualifying for, or is likely to qualify for, a threatened category in the near future;

- 'Least Concern' taxa have been evaluated against the criteria and do not qualify for 'Critically Endangered', 'Endangered', 'Vulnerable', or 'Near Threatened'. Widespread and abundant taxa are included in this category.

2.3 *PRODUCTION SHARING AGREEMENT*

The Sakhalin II Production Sharing Agreement (PSA) (1) between the Russian Federation and SEIC is the legal basis for the development of the Lunskoye Field. The PSA was concluded in June 1994, before the enactment of the Federal '*Law on Production Sharing Agreements*' (known as the 'PSA Law') of 30 December 1995 No. 225 (as modified on January 7, 1999). Although officially the PSA Law came into force after the original PSA agreement between the Russian Federation and SEIC, SEIC will ensure that the development of the field is in compliance with the law, including the requirements stated below.

"The works under the agreement shall be accomplished in compliance with requirements of the legislation of the Russian Federation … concerning the safe conduct of works, and protection of the subsoil, the natural environment and the health of the population. In this respect, the agreement shall stipulate the investor's obligations for taking of measures aimed at preventing harmful effects of the said works on the natural environment, as well as to eliminate the consequences of such effects".

The PSA states that the activities will be conducted in accordance with:

- laws, regulations, decrees, and other governmental acts applicable on the territory of the Russian Federation, officially enacted, and publicly available;
- environmental standards generally accepted in the international oil and gas industry. Such standards are subsequently defined in the agreement as:

  "construction and operation codes, standards and industry practices, and environmental, health and safety norms, policies and practices, generally accepted in the international oil, gas, pipeline, and LNG industries".

(1) A PSA is a form of licence which is used in certain countries. Generally PSAs obligate the contractor, the operator and other participants in the licence to provide the financing and to bear the risk of exploration, development and production activities in exchange for a share of production revenues. Usually a percentage of production is reserved for the recovery of the contractor's cost ('cost oil') and the remainder ('profit oil') is shared with the government. In the case of Sakhalin Island, potential oil and gas projects are arranged on a PSA basis to allow Russian experts and businesses, and western oilfield development skills and technologies to work together (American Business Centre – Yuzhno-Sakhalinsk, 2001).

2.4 RUSSIAN FEDERATION CLASSIFICATIONS, LEGISLATION, STANDARDS AND GUIDELINES

2.4.1 *Protected Species Classifications*

Protected species within the Russian Federation have been identified and are included within a document named The Red Book of the Russian Federation. The document provides an assessment of the rarity and status of native species, grouped within the categories described below.

- Status 1: represents endangered species that are considered to be under threat of extinction;
- Status 2: represents species assessed as being vulnerable;
- Status 3: is applied to rare species where population numbers are declining;
- Status 4: represents species with small populations, where numbers are difficult to estimate, or species that are considered to be at the limits of their range.

2.4.2 *Federal Legislation*

There is no specific Russian Federation legislation that requires an EIA to be carried out for offshore seismic surveys, however, consideration of the following legislation may be relevant to the consenting process for the Lunskoye seismic survey.

Environmental Review

In Russia the State Environmental Review (SER) acts as a preventive instrument of environmental control. The goals and objectives of the State Environmental Review are defined by the Federal Law *On Environmental Review (1995)*. These goals are:

"to define compliance of the planned economic activity with environmental requirements and permissibility of its realisation."

Major functions of the SER include regulation of compliance with environmental standards during development of pre-project and project documentation for construction (reconstruction) of enterprises and other facilities that impact the environment.

The Law on Environmental Protection (2002)

The Law on *Environmental Protection (2002)* affords protection to 'elements of nature' including:

- state natural reserves and parks;
- natural monuments;
- objects or species that are of special nature conservation, scientific, historic, cultural, aesthetic, recreational, sanitary or other importance;
- rare soils, vegetation, animals and other organisms and their habitats;
- the continental shelf and offshore economic zone of the Russian Federation;
- traditional places of residence and economic activity of the indigenous nations of the Russian Federation.

Specific requirements on the protection of separate elements of nature are stipulated in the *Water Code (1995)* the law *On Wildlife (1995),* and the law *On Air Protection (1999).*

The Law on Special Protected Territories

The law *On Special Protected territories (1995)* defines special requirements that apply to operational activities on protected sites.

Continental Shelf, Territorial Seas and the Exclusive Economic Zone (EEZ)

Requirements on environmental protection and management of the resources in the aquatic territories and EEZ of the Russian Federation are stipulated in the laws: *Continental Shelf of the Russian Federation (1995), The Federal Act on the Maritime Waters, Territorial Sea and Contiguous Zone of the Russian Federation (1998)* and *The Federal Act on the Exclusive Economic Zone of the Russian Federation (1998).*

The Sea of Okhotsk falls almost entirely under Russian jurisdiction as the majority of its area is within the 200-mile economic zone.

Social Impact

Several laws are adopted in the Russian Federation that reflect public concern on social impacts and on the conservation of human health. The main laws affecting the project are:

- the law *On Guarantees of Rights of Indigenous Ethnic Minorities in the Russian Federation (1999);*

- the law *On Territories of Traditional use of Natural Resources by Ethnic Minorities of the North, Siberia and Far East of the Russian Federation (2001).*

2.4.3 *Regional Legislation: Sakhalin Oblast*

The key legislative Acts from the Sakhalin Oblast region that regulate environmental issues and natural management are:

- *Regulations of the Sakhalin Oblast (2001),* which states basic principles of natural management on the territory of the region;

- The law *On Development of Specially Protected Natural Territories of Sakhalin Oblast (2000),* which regulates the establishment, protection and use of specially protected natural territories of Sakhalin Oblast and defines the economic activities permissible within these sites;

- Sakhalin Oblast law on the target program *Economical and Social Development of the Indigenous Population of the North for the years 2001-2004*;

- Sakhalin Oblast law *On Preservation and Development of Folk Crafts of the Indigenous Nations of the North that are Living on the Territory of the Sakhalin Oblast (2000)*;

- Decree of the Governor of Sakhalin Oblast *On Measures for Creation of the Conditions for Preservation of Traditional Modes of Living and Development of Traditional Branches of Economy of the Indigenous Population of the North (2001).*

Any activity that effects fauna and flora should be in compliance with requirements of the Sakhalin Oblast law *On the Red Book of Sakhalin Oblast (1999),* which regulates activities related to protection and preservation of rare and endangered wildlife species that inhabit Sakhalin Oblast territories.