

FINAL REPORT

**BCLME PROJECT BEHP/IA/03/03: “HARMONISATION OF
NATIONAL ENVIRONMENTAL POLICIES AND
LEGISLATION FOR MARINE MINING, DREDGING AND
OFFSHORE PETROLEUM EXPLORATION AND
PRODUCTION ACTIVITIES IN THE BCLME REGION”**

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EXECUTIVE SUMMARY

The Benguela Current Large Marine Ecosystem (BCLME) Programme is a multi-sectoral initiative by Angola, Namibia and South Africa to facilitate the integrated management, sustainable development and protection of the Benguela Current ecosystem.

The objective of project BEHP/IA/03/03 is to facilitate the harmonisation of the national policies and legislation with regard to environmental aspects of marine mining, dredging and offshore petroleum exploration and production activities in order to promote environmental sustainability through responsible best practices.

The project consists of a review of national policies and legislation relating to the environmental aspects of marine mining, dredging, and offshore petroleum exploration and production activities in the three BCLME countries. This has been based on an examination of current government policies, legislation, regulations and pro-forma agreements, and a comparison with international best practice. This review was followed by in-country consultative meetings with senior government officials, industry representatives and other selected stakeholders to discuss the project's findings, conclusions and recommendations.

In all three BCLME countries there is significant evidence in the Constitution, policies, long term plans and visions that the countries are concerned about the protection of the marine environment and possible impacts of mining, dredging and offshore petroleum exploration on the environment.

In all three countries the licensing of mining and petroleum activities is covered by legislation. Whilst the licensing regime for mining is rather similar in the three countries, there are significant differences in the regime for petroleum exploration and production. Namibia and South Africa have a concession/tax regime whereby the oil company is the licence-holder and owner of the produced petroleum. In Angola the national oil company is the licence-holder and shares the petroleum production with the oil company which is the licence operator on contract to the national oil company. There is no specific legislation licensing dredging.

Although in South Africa the general environmental legislation is further developed than in Angola and Namibia, as a matter of practice the sectoral legislation for the mining and petroleum activities takes precedent, i.e. in South Africa the general environmental legislation does not regulate marine mining and offshore petroleum exploration and production as activities which require an Environmental Impact Assessment (EIA) but leaves the obligation to the sectoral Minerals and Petroleum Resources Act.

In all three countries, EIAs are required before any significant activity in marine mining, dredging and offshore petroleum exploration and production are carried out. In addition in Namibia and South Africa Environmental Management Plans (EMP) are required through policy and legislation respectively, whilst in Angola many of the elements of such EMPs are mentioned in the legislation.

In South Africa, the new Mineral and Petroleum Resources Development Act and associated Regulations which cover both the mining and petroleum sectors are very clear in their requirements for EIAs and EMPs. Where the environmental protection provisions in the sectoral petroleum legislation are weak, such as in Angola, separate sectoral environmental legislation is either in place or being developed. In Namibia the requirements for EIAs are spelled out in the Model

Petroleum Agreement and the general Environmental Assessment Policy for Sustainable Development and Environmental Conservation.

The current Mining Act in Angola is old and weak in environmental protection, but there are presently no marine mining activities. In Namibia the new draft Minerals Bill is a major improvement in this respect over the current Minerals Act. The Bill requires the development of regulations to be sufficiently effective.

In all three countries the Ministry responsible for promotion of mining and petroleum investment is also responsible for the adherence to the environmental provisions in the legislation, although in Namibia this responsibility will formally be transferred to the Ministry of Environment and Tourism once the new Environmental Management Bill has been introduced. However, the draft Bill also promotes the idea of collaboration between the Ministry of Environment and Tourism and other Ministries as appropriate. In South Africa, if the new EIA regulations (a first draft of which has been published for comment) come into force in their current form, certain mining activities will also be subject to EIAs enforced by provincial environmental authorities or the Department of Environmental Affairs and Tourism.

In Namibia and South Africa, which are common law jurisdictions, the domestic applicability of international conventions requires the development of implementing national legislation. In Angola, which is a civil law jurisdiction, the ratification of Conventions makes the provisions applicable automatically in the country. It is yet uncertain whether this is also valid for Conventions which are not yet in force because insufficient countries have signed and/or ratified them.

Angola is party to most of the relevant international agreements, while Namibia and South Africa have not signed and/or ratified some important conventions such as the Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC). In particular in Namibia some conventions that have been signed and ratified have yet to be made effective by the development of implementing legislation.

Full harmonisation of the legislation for environmental protection between the three BCLME countries seems impractical because of their different legal systems, and unnecessary because of the wealth of legislation already in place. Whilst different standards are evident when comparing environmental policies and legislation in the three countries, all either have, or are in the process of, putting safeguards in place to ensure the minimisation of unacceptable impacts from marine mining, dredging and offshore petroleum exploration and production activities.

It is recommended that the efforts should rather be directed at harmonisation of standards through e.g. exchange of Guidelines, and in-country harmonisation of legislation that regulates general and sectoral environmental protection. In all three countries, there are jurisdictional overlaps that are cause for concern. Overlaps are not a problem if they achieve multi-sectoral reinforcement of the same principle or standard. However, if they result in conflicting processes and/or standards, then both authorities and the private sector will be confused as to the required targets and outcomes. In any policy and legal environment, clarity and consistency must be achieved. Concomitantly with the jurisdictional overlaps, there is institutional duplication in all three countries. As noted earlier, this duplication is beneficial if the same message is being reinforced by different organisations, but it is not helpful when officials from different (sometimes competing) Ministries or Departments are issuing contradictory instructions and

information. The case is strong for policy, legislative and institutional consolidation in all three countries.

In all three countries enforcement of the current legislation is hindered by a shortage of trained personnel and lack of capacity in general. This is exacerbated by the fact that technical expertise and competence is spread thinly across too many institutions. It might be better to consolidate and, in so doing, achieve some sort of cohesion. This issue has already been addressed in the BCLME project: "Training and Capacity Needs Assessment for the BCLME", by Anchor Environmental Consultants CC and Marlene Laros & Associates (February 2004).

Although the EIA systems are largely similar in each of the three countries, the key recommendations (in addition to the above) are:

- Emission and discharge standards and permit systems still need to be developed. Research to set meaningful standards is still outstanding. Some BCLME projects will address these issues, e.g. Project: BEHP/LBMP/03/04: "The development of a common set of water and sediment quality guidelines to the coastal zone in the BCLME region", being carried out by CSIR (completion date September 2005);
- Rehabilitation/decommissioning funds need to be specified and established;
- Each country must ensure that its EIA systems stipulates special attention to transboundary impacts, both direct and indirect;
- Namibia must pass its Environmental Management Bill and Pollution Control and Waste Management Bill, both of which were drafted several years ago;
- All three countries must sign the relevant conventions and SADC protocols, and implement these;
- All three countries have internal conflicts of interest since the organs of state that regulate the activities concerned are proponents, regulators inspectors and judges. There is a need for independent guiding, reviewing and post-implementation monitoring of EIAs.

1. INTRODUCTION

The Benguela Current Large Marine Ecosystem (BCLME) Programme is a multi-sectoral initiative by Angola, Namibia and South Africa to facilitate the integrated management, sustainable development and protection of the Benguela Current ecosystem. It is funded by the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP) with financial and in-kind contributions by the three member countries.

All three BCLME countries are involved in petroleum exploration and production activities and in dredging for the development and maintenance of major ports. In addition, extensive marine diamond mining activities are taking place along the coasts and offshore of South Africa and Namibia.

Objectives (ref. Annex 1)

The objective of project BEHP/IA/03/03 is to facilitate the harmonisation of the national policies and legislation with regard to environmental aspects of marine mining, dredging and offshore petroleum exploration and production activities in order to promote environmental sustainability through responsible best practices.

We have attempted to ascertain via internet searches what work, if any, has been undertaken in relation to the regional harmonisation of legislation under the auspices of other Large Marine Ecosystem (LME) programmes. Unfortunately we have been unable to identify any specific information on this point and it appears that other LME programmes have prioritised developing or strengthening national legislation.

In our view, it is undoubtedly desirable that the national laws that regulate marine mining, dredging and offshore petroleum exploration and production in all the BCLME countries seek to achieve the same broad objectives in relation to the protection of the BCLME. However the desirability of establishing the same standards or legal rules in each country should be evaluated on a case by case basis since different national conditions and legal systems often necessitate different regulatory approaches.

Scope of Work (ref. Annex 2)

The project consists of a review of national policies and legislation relating to the environmental aspects of marine mining, dredging, and offshore petroleum exploration and production activities in the three BCLME countries. This has been based on an examination of current government policies, legislation, regulations and pro-forma agreements, and a comparison with international best practice. This review will be followed by consultative meetings with senior government officials, industry representatives and other selected stakeholders, leading to the drafting of guidelines for those environmental policies and legislation that could be harmonised on a regional basis.

Study team (ref. Annex 3)

- Dr Peter Tarr: Project management and input on Namibian legislation and environmental impact assessment practices

- Mr Ger Kegge: Project co-ordination and input on Namibian legislation, and marine mining, dredging and petroleum exploration and production activities
- Mr Vlady Russo: Input on Angolan legislation and environmental protection practices
- Ms Luisa Campos: Input on Angolan legislation and licensing regime for petroleum industry in Angola
- Ms Terry Winstanley: Input on South African legislation and general environmental legal advice
- Mr Cormac Cullinan: Input on South African legislation and general environmental legal advice

2. METHODOLOGY AND APPROACH

The project was carried out in 2 phases:

2.1 First phase

Review national policies and legislation on the environmental aspects of marine mining, dredging, and offshore petroleum exploration and production activities in the three BCLME countries based on current government policies, legislation, regulations and pro-forma agreements.

Relevant documentation and information on policies, legislation and guidelines was collected in the three BCLME countries and documented in this discussion paper. Extensive use was made of previous studies including some commissioned by the BCLME Programme (ref Chapter 10).

A first draft of the discussion paper was discussed at an in-house workshop of all team members for completeness and accuracy. The team then analysed key similarities and differences regarding the respective policies and legislation, and identified critical gaps. An assessment was also made of how national policies and legislation compared with international best practice.

In order to determine the scope of the study marine mining, dredging and petroleum exploration and production activities were defined as follows:

- Marine mining: Prospecting and/or mining by removal of sediments from the seabed, below the high water mark, as far as the Exclusive Economic Zone (EEZ) and/or the continental shelf;
- Dredging: Removal of sand and mud from the seabed for the purpose of deepening a harbour or approach to a harbour or for any other development, followed by dumping of the dredged material;
- Offshore petroleum exploration and production: Exploration for and production of gas and oil from beneath the seabed.

Environmental Impact Assessments for marine mining, dredging, and offshore petroleum exploration and production activities normally make reference to many conventions, policies, laws, regulations and guidelines to place the

activities in a wider context and assess impacts on health, safety, environment and economy. Only those conventions, policies and laws which are fundamental to marine mining, dredging and offshore petroleum exploration and production activities were included in the study (ref. Annex 4).

This discussion paper gives a brief description of the international and regional agreements and national policies and legislation of the three BCLME countries, with an emphasis on the provisions concerning the protection of the marine environment (Chapters 3 – 6). In addition a brief description is given of the ministries in the three countries which are responsible for the policies and which administer the various legislation (Chapters 4 - 6).

Methodology

Since the ultimate objective of this project is to reduce unacceptable negative environmental impacts, it was decided to tackle the evaluation from the perspective of the impacts, and from there to assess the extent to which existing national legislation is effective in safeguarding the marine environment. The key impacts were identified as follows:

Marine Mining

- Prospecting: Seismic surveys cause shock waves which could negatively affect fish larvae and other organisms. These acoustic disturbances could also cause fish to move out of an area;
- Prospecting and mining: Sea bed disturbance could alter habitat and cause biodiversity loss;
- Mining: Tailings, sand and mud dumped overboard increases turbidity and local oxygen depletion which could negatively affect the pelagic and benthic ecosystem including fish and other planktonic organism;
- Prospecting and mining: Waste dumping (household) could result in pollution;
- Prospecting and mining: Accidents could result in pollution;
- Prospecting and mining: Possible introduction of alien invasive species in ballast water and on the hull of prospecting and mining vessels possibly causing biodiversity loss.

Dredging

- Dredging: Habitat alteration, which could lead to biodiversity loss, though harbours are generally understood to be non-pristine;
- Dredging: Release of heavy metals caused by disturbance of the harbour floor by machinery and pipes;
- Dumping: Release of heavy metals into the water column as a result of dumping the dredged materials into the sea;
- Dumping: Habitat alteration as a result of sand dumped onto other sea-floor habitats, impacting upon marine species in the areas affected;
- Dredging and dumping: Possible introduction of alien invasive species in ballast water and on the hull of dredgers and barges possibly causing biodiversity loss.

Offshore Petroleum Exploration and Production

- Exploration: Seismic surveys cause shock waves which could negatively affect fish larvae and other organisms. These acoustic disturbances could also fish to move out of an area;
- Exploration and production: Sea bed disturbance from drilling (dumping of drill cuttings and mud) could result in habitat loss and suffocate species, and sediment plumes could increase turbidity and thus affect marine organisms;
- Exploration and production: Waste dumping (household) could result in pollution;
- Exploration and production: Flaring could result in pollution and possible bird mortalities;
- Exploration and production: Accidents including blow outs could result in pollution;
- Exploration and production: Possible introduction of alien invasive species in ballast water and on the hull of seismic vessels and drilling units possibly causing biodiversity loss;
- Production: Discard of produced water introduces possibly contaminated water which could affect marine species;
- Production: Disturbance of habitat as a result of laying pipelines;
- Production: Disposal of platforms after their use could (1) result in a release of oils, grease and hydraulic fluid that can cause pollution, and (2) alter habitat by the presence of foreign objects on the sea bed.

It is evident from this list that for some activities all three sectors have identical or similar impacts upon the environment. This makes it important for countries to achieve reasonable consistency in their sectoral policies and legislation, and in their mechanisms for enforcement.

Based on the list of impacts the team examined the appropriate policies and legislation in the three countries, identified gaps, and compared these policies and legislation with international best practice (Chapter 7 and Annex 5).

A draft discussion paper was prepared reflecting the work completed and conclusions drawn, including provisional recommendations for harmonisation, which was presented at the Consultative meetings held during the Second phase of the project.

2.2 Second phase of the project

Consult with senior government officials and industry and draft guidelines for the environmental policies and legislation that need to be harmonised on a regional basis.

Following these meetings final recommendations and guidelines have been drafted and documented in this final report which will satisfy the requirement in the Terms of Reference for “a comprehensive descriptive report of national policies and legislation on environmental aspects related to marine mining, dredging and offshore petroleum exploration and production activities highlighting areas of similarity and differences in terms of policies, and legislation and their implementation, also including reports of consultative meetings with stakeholders including recommendations and draft guidelines on areas where regional harmonisation would be beneficial, e.g. to align with regional initiatives (SADC) and adoption of MARPOL, standardisation of water quality criteria and environmental management”.

3. INTERNATIONAL AGREEMENTS

International and regional agreements concerning the protection of the (marine) environment set minimum standards to be adhered to by countries which are party to them. These agreements to some extent guide international best practice. The following international and regional agreements have been identified for comparison with national legislation. Because Namibia and South Africa have a common law system, national implementing legislation must be passed to give effect to these agreements. By contrast, ratification by Angola implies automatic application of such agreements as a result of its codified civil law system.

Convention of the International Maritime Organisation, 1948

The International Maritime Organisation (IMO) is a specialist United Nations agency dealing with maritime issues, including development of all the marine pollution control conventions.

All three BCLME countries are party to this Convention and they have enjoyed assistance from IMO, e.g. in the drafting and/or upgrading of oil spill contingency plans.

Convention on Civil Liability for Oil Pollution Damage, 1969

This Convention provides for a compensation fund for clean-up costs and environmental damage subject to certain conditions and ceilings.

The Civil Liability Convention has been implemented in South Africa by means of the Marine Pollution (Control and Civil Liability) Act No. 6 of 1981, which Act was also incorporated into the laws of Namibia during the South African occupation of Namibia. Angola acceded to this Convention in 2001.

Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention), and 1996 Protocol

The 1996 Protocol deals with the incineration and dumping of waste at sea, including the disposal of exploration platforms and the like, and dredged material.

In the special case of dredged materials, sea disposal is often an acceptable disposal option. However, opportunities should be taken to encourage the productive use of dredged material, for example, for beach nourishment, land reclamation or use in aggregates. For contaminated dredged materials, consideration should be given to the use of special methods to dispose of them.

South Africa is a Party to the London Convention and both South Africa and Angola¹ are Parties to the 1996 Protocol to the London Convention which will replace the 1972 Convention when it enters into force. All necessary documentation has been prepared for the accession of Angola to the London Convention.

¹ The National Assembly approved Angola's signature of this Protocol in 2001

Convention for the Prevention of Pollution from Ships, 1973 (MARPOL 73/78) and 1996 Protocol (the Protocol)

This convention was adopted on 2 November 1973 by the International Conference on Sea Pollution organised by IMO and subsequently substantially amended by the Protocol of 1978. These documents must be read as one and are generally referred to as MARPOL 73/78. The convention sets the standards developed by the IMO for tankers and other large vessels and serves as the most important global treaty for the prevention of pollution from the operation of ships. It requires that states party to the Convention must provide reception facilities and regulations for the disposal of oily wastes and chemicals. The government of Angola does not provide reception facilities but encourages the oil operators to have their own facilities. As for the disposal of oily wastes and chemicals the Ministry of Petroleum is currently working on legislation to address this gap. The regulations and standards being presently used are from IMO. The Convention serves to control all waste disposal at sea which includes all oil, hazardous waste, solid waste (plastics, tins, glass, organic matter etc) and sewage. The Convention does not regulate the disposal of waste by dumping at sea nor pollution arising from exploration and exploitation of sea-bed minerals.

All three BCLME countries have acceded to the MARPOL 73/78 Convention. Angola has acceded to the Convention through Resolution No. 41/01 of 21 December. Its implementation is being administered by the Ministry of Transport.

United Nations Law of the Sea Convention, 1982 (UNCLOS)

This convention which only came into force in 1994 seeks to establish a comprehensive legal regime to regulate activities on and in relation to the world's oceans and seas, i.e. requiring states to adopt legislation to reduce marine pollution from sea-bed activities in the Exclusive Economic Zone and on the continental shelf (Articles 208 and 214).

Article 194 requires states to take necessary measures to ensure that activities under their jurisdiction or control do not "cause damage by pollution to other states and their environment" and to take measures to minimise "the release of toxic, harmful or noxious substances, especially those that are persistent, from land based sources, from or through the atmosphere, or by dumping", as well as "pollution from vessels, installations and devices used in exploration or exploitation of the natural resources of the seabed and subsoil" and "pollution from other installations and devices operating in the marine environment".

Article 196 requires states to take necessary measures to "prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new, to a particular area of the marine environment, which may cause significant and harmful changes thereto".

Article 199 requires states to "jointly develop and promote contingency plans for responding to pollution incidents in the marine environment".

Article 204 requires states to endeavor, as far as practicable, to "observe, measure and analyse, by recognised scientific means, the risks or effects of

pollution of the marine environment” particularly those activities that they permit or engage in.

Articles 207-211 require states to adopt laws to “prevent, reduce and control pollution of the marine environment” from *inter alia*, land-based sources (including rivers, estuaries, pipelines and outfall structures), seabed activities, dumping, vessels, from or through the atmosphere. Articles 213-222 specify measures required to enforce such legislation.

Articles 210 and 216 contain specific provisions relating to marine pollution resulting from dumping of waste at sea.

Angola, Namibia and South Africa have all ratified UNCLOS, which came into force on 16 November 1994.²

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989

This convention entered into force in May 1992 and seeks to establish a global regime for the control of international trade in hazardous and other waste. The main feature of the convention is the establishment of a system of prior informed consent for the transboundary movement of hazardous wastes. No waste may thus be exported to a state that is party to the convention without express consent of the competent waste authority in that state and subject to any conditions that it may impose. Wastes are classified as hazardous, either by reference to categories set out in the Annexes I and III of the convention, or if they are so classified by national legislation.

Article 4 of the convention requires that parties to the Convention take appropriate measures to minimise the generation of hazardous wastes, to ensure availability of adequate disposal facilities to reduce transboundary movement of hazardous and other wastes to a minimum, and permit the export of hazardous wastes only if they do not have the technical capacity and facilities to dispose of the wastes in an environmentally sound manner themselves, or where the wastes themselves are required for recycling or recovery. The convention also requires that parties prohibit the import and export of wastes to and from non-Party countries except pursuant to certain conditions.

The Basel Convention has been ratified by Namibia and South Africa, whilst in Angola the Government has signed but it has not yet been ratified.

Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC)

The Convention requires signatory parties to establish measures for dealing with a pollution incident, either nationally or in co-operation with other countries.

Angola has been a party to this Convention since 2001 and is thereby required to ensure that all ships carry onboard an oil pollution emergency plan, which is to be developed by the International Maritime Organisation. Offshore operators in Angola are also required to have such an oil pollution

² UNCLOS was ratified by: Angola on 5 December 1990; Namibia on 18 April 1983; and South Africa on 23 December 1997.

emergency plan for responding promptly and effectively to oil pollution incidents. Ships are required to report incidents of pollution to coastal authorities. Equipment for combating oil pollution is required to be available at all times, oil spill combating exercises are required to be practised and a detailed plan for dealing with pollution events must be developed. Parties to the convention are also required to provide assistance to others in the event of a pollution emergency.

Neither Namibia nor South Africa is a signatory to this convention, but Namibia intends becoming a party.

Convention on Biological Diversity, 1992

The objectives of this Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.

In the Convention it is noted that the fundamental requirement for the conservation of biological diversity is the in-situ conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings,

All three BCLME countries are party to this Convention. Namibia developed, and Angola and South Africa are in the process of developing their National Biodiversity Strategies and Actions Plans.

Agenda 21 (1992) and Johannesburg Plan of Implementation (2002)

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil resulted in the adoption of Agenda 21. Agenda 21 is an international programme aimed at achieving sustainable development in the 21st Century: it provides objectives and recommended actions for a range of environmental issues. Coastal states are encouraged to deal with marine pollution derived from both marine and terrestrial sources. With respect to petroleum exploration and production activities, coastal states are called upon to assess existing regulatory measures regarding pollution from offshore oil and gas platforms.

The Johannesburg Plan of Implementation developed during the World Summit on Sustainable Development in 2002 is a follow-up of Agenda 21 which reaffirms Governments' commitment to the Rio Principles and the full implementation of Agenda 21. It calls for the enhancement of corporate environmental and social responsibility and accountability through the use of environmental impact assessment procedures.

Agenda 21 has had a significant impact on the development of environmental legislation in Angola, particularly with regard to the Angolan Environment Framework Act (*Lei de Bases do Ambiente*). It has also had impact on a number of environmental related activities as the principles contained in the Agenda 21 have been widely used in environmental impact assessments, environmental education and training, environmental management, etc. Angolan commitment to the principles of Agenda 21 has encouraged the development of legislation in the field of fisheries, oil and mining.

It was also based on Angola's commitment to Agenda 21 that the State Secretariat for the Environment was established in 1993. The importance of Agenda 21 in Angola, particularly for civil society, was visible with the development of conditions conducive for the establishment of environmental non-governmental organisations.

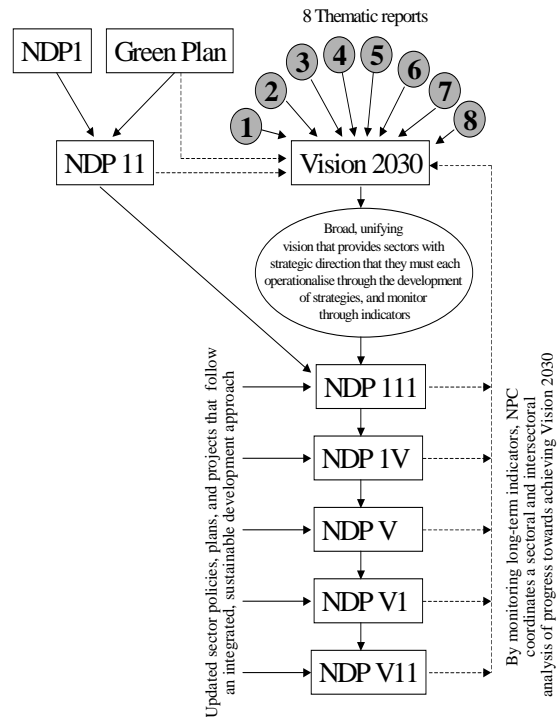
The draft National Environmental Management Programme (*Programa Nacional de Gestão Ambiental – PNGA*) draws extensively on the Agenda 21 principles. The PNGA is a political instrument that facilitates the implementation of environmental strategies towards achieving sustainable development in Angola. Concepts such as the 'polluter-pays-principle' and the 'precautionary principle' are reflected in most of the recent environmental-related legislation.

The Environmental Education and Awareness Programme (PECA) being implemented in Angola since 2001 is a direct result of the Agenda 21 recommendations in its Chapter 36 on education, training and public awareness.

Namibia's response to the United Nations Conference on Environment and Development (UNCED) was the *Green Plan*, which was drafted by the Ministry of Environment and Tourism (MET) in 1992. This document identified and analysed the main environmental challenges facing Namibia and specified actions required to address them. Following on from the Green Plan and largely in response to Agenda 21, the MET formulated *Namibia's 12 Point Plan for Integrated and Sustainable Environmental Management* – a strategic document that set out the most important areas that needed to be developed to place Namibia on a sustainable development path. These included the need for policy formulation and debate, legislative reform and the identification of key programmes for gathering critical environmental information, spearheading new approaches for natural resource management and developing local capacity.

Based on the foundation laid by Namibia's Green Plan, an effort was made to incorporate environmental and sustainable development issues and options into the country's second National Development Plan (NDP II – for the years 2001 to 2006). In addition, Namibia's VISION for 2030 which was formulated in 2001/2002 aims to help guide the country's five-year development plans from NDP III through to NDP VII (Figure 1) and, at the same time, provide direction to government ministries, the private sector, NGOs and local authorities (NPC 2000b). This Vision fully embraces the idea of sustainable development and for the Natural Resource Sector is defined as: "*The nation shall develop its natural capital for the benefit of its social, economic and ecological well-being by adopting strategies that: Promote the sustainable, equitable and efficient use of natural resources; Maximize Namibia's comparative advantages and; Reduce all inappropriate resource use practices. However, natural resources alone cannot sustain Namibia's long-term development, and the nation must diversify its economy and livelihood strategies*".

Fig 1: Schematic representation of the links between NDP I and II, the Green Plan and VISION 2030



Although Namibia does not have a national strategy for sustainable development, the most recent National Development Plan (NDP II) and VISION 2030 have attempted to place sustainable development at the heart of national planning.

Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region; and Protocol concerning Co-operation in Combating Pollution in case of Emergency (Abidjan), 1981

This Convention has been in force since 5 August 1984. Angola has signed but not yet ratified the Convention while Namibia and South Africa have not done either.

The objective of the Convention is “To protect the marine environment, coastal zones and related internal waters falling within the jurisdiction of the States of the West and Central African region.”

The Contracting Parties shall:

- Make all necessary measures to prevent, reduce, combat and control pollution of the Convention area (art. 4), particularly pollution from ships and aircraft (arts. 5 and 6), land-based sources (art. 7), and activities relating to exploration and exploitation of the sea bed (art. 8) and pollution from or through the atmosphere (art. 9);
- Prevent, reduce, combat and control coastal erosion (art.10);
- Protect and preserve rare or fragile ecosystems, as well as the habitat of depleted, threatened or endangered species and other marine life in specially protected areas (art. 11);

- Cooperate in dealing with pollution emergencies in the Convention area (art. 12), and in exchanging data and other scientific information (art. 14);
- Develop technical and other guidelines regarding environmental impact assessment of their development projects (art 13);
- Establish rules and procedures for the determination of liability and the payment of adequate and prompt compensation for pollution damage of the Convention area (art. 15).

SADC Protocol on Mining (1997)

Article 8: “Environmental Protection” states that:

- Member States shall promote sustainable development by ensuring that a balance between mineral development and environmental protection is attained.
- Member States shall encourage a regional approach in conducting environmental impact assessments especially in relation to shared systems and cross border environmental effects.
- Member States shall collaborate in the development of programmes to train environmental scientists in fields related to the mining sector.
- Member States undertake to share information on environmental protection and environmental rehabilitation.

This Protocol has been ratified by Namibia and South Africa and entered into force on 10 February 2000. Angola has yet to ratify it.

SADC Environmental Policy and Regulatory Framework for Mining (2001)

The main purpose and objective in establishing the Southern African Development Community (SADC) was to achieve formal regional cooperation, co-ordination and integration between SADC countries on various aspects relating to trade, transportation, communication, energy and the environment. In line with this, the SADC Sub-committee on Mining and the Environment undertook the task of assessing existing regulatory frameworks for mining as they pertained to the environment and for developing an Environmental Policy and Regulatory Framework for SADC with a view to assisting member states to harmonise the regulation and environmental management of their mining sectors.

Most SADC countries follow a traditional command-and-control regulatory approach, in which government prescribes desired changes through requirements, then promotes and enforces compliance with these requirements through laws, regulations and/or permits. It is suggested though, that while this is a workable approach, additional value could be leveraged through the implementation of market based and economic incentives, and by encouraging a greater degree of co- and self-regulation.

All three BCLME countries apply a system where environmental impacts of mining are identified, assessed and mitigatory measures recommended, but only Namibia and South Africa take this process further by requiring that the environmental impacts identified and assessed, be managed throughout the life of the mining operation. South Africa is the only country that presently requires that financial provision be made for rehabilitation and/or ongoing management of environmental impacts.

The Policy recommends that an effective “cradle-to-grave” environmental management approach for mining be applied within the SADC region, along the lines of Integrated Environmental Management (IEM). It is furthermore suggested that this include requirements for identifying, predicting, and assessing environmental impacts, adequate opportunity be given to interested and affected parties (I&APs) to make their input, that alternatives (including the no-go option) and mitigation measures are thoroughly investigated, that arrangements be made for monitoring and management of impacts, and that mines be closed efficiently and effectively once they cease to operate, and that the areas be appropriately rehabilitated.

A detailed set of requirements for new mines is suggested including:

- detailed feasibility investigations (to ascertain whether the mining operation is economically and technically feasible),
- environmental scoping exercises (to assess the status of the receiving environment, to identify potential impacts and alternatives, and to allow I&APS to express their views),
- Environmental Impact Assessments (EIAs) be conducted and Environmental Management Programmes (EMPs) be drawn up
- environmental monitoring and EMP performance assessment and remediation be carried out.

Detailed guidelines are also provided for closure and rehabilitation of mines, as are recommended environmental quality standards and criteria for the region.

Namibia's draft Minerals Bill and South Africa's new Minerals Resources Development Act conform with the recommendations.

International industry guidelines

The international petroleum and mining industries have also developed environment management guidelines such as Waste Management Guidelines (1993), Guidelines for the Development and Application of Health, Safety and Environmental Systems (1994), Environmental Management in Oil and Gas Exploration and Production (1997), by the Oil and Gas Producers Association (formerly known as the International E&P Forum), and Environmental Guidelines for World-Wide Geophysical Operations (1993), by the International Association of Geophysical Contractors.

These guidelines are normally adhered to when national legislation is lacking and/or no guidelines are available. Only South Africa has a set of nationally prepared guidelines in place issued by the Department of Minerals and Energy.

4. ANGOLA – NATIONAL POLICIES AND LEGISLATION

4.1 Introduction

Angola's 1650 km coastline is considered one of Africa's richest. The cold Benguela current in the southern part of the coastline is particularly rich in fish (e.g. sardines, tuna and shellfish) and other marine species. Offshore oil production is fundamental to the economy, contributing 45% of the Gross Domestic Product (GDP) and constituting around 90% of exports and over 80% of government revenue.

Whilst the Angolan economy has been disrupted by the long armed conflict, the country's petroleum and mining industries have remained the main contributors towards foreign earnings. Angola's oil exports are essential for the economy, providing almost half of its GDP.

In order to diversify the local sources of revenue and reduce dependency on the petroleum and mining industries the Government is now promoting other sectors of the economy, including fishing, agriculture and coastal maritime transportation.

Other efforts from the government include the rehabilitation and expansion of the country's infrastructure which was damaged by the long armed conflict, i.e. roads, electrical grid, dams, ports and railways.

Many of the above activities will have an impact on the marine environment. In order to control environmental damage, the Government has been developing various environmental laws, including specific sectoral ones, e.g. for the upstream petroleum industry.

The institutions formally responsible for the management of environmental impacts resulting from petroleum and mining activities in Angola are the Ministry of Urban Affairs and Environment, the Ministry of Petroleum and the Ministry of Geology and Mines. There is however currently no offshore diamond mining in Angola.

So far the Ministry of Petroleum in collaboration with the state-owned oil company Sociedade Nacional de Combustíveis de Angola (SONANGOL) have regulated petroleum exploration and production operations. With the adoption of the Environment Framework Act (EFA), increasing responsibility for the implementation of national environmental policy rests with the Minister of Urban Affairs and the Environment.

Some of the key legal instruments for managing environmental quality, the Environmental Impact Assessment Decree, pollution and waste management regulations, and water and air quality standards are either only just or not yet in place. Notwithstanding these legal deficiencies, the Ministry of Petroleum has developed reporting requirements for each stage of petroleum industry activities. These must be met prior to the authorisation of such activities, and there must also be regular reporting on the quantity and quality of waste discharges.

4.2 Policies and Legislation

In this section, the various policies and laws relating to protection of the marine environment from mining, dredging and exploration and production

activities are examined. Existing and emerging policies and laws are assessed in an attempt to provide a comprehensive analysis.

General environmental

Constitution of the Republic of Angola (Lei Constitucional da República de Angola), 1992

The Constitution was signed into law in 1992 and provides the basis for the Environment Framework Act through two articles that enable environmental protection and conservation and the right to a healthy and unpolluted environment.

Article 12 states that:

1. All natural resources existing in the soil and subsoil, in internal and territorial waters, on the continental shelf and in the exclusive economic area, shall be the property of the state, which shall determine under what terms they are used, developed and exploited.
2. The State shall promote the protection and conservation of natural resources guiding the exploitation and use thereof for the benefit of the community as a whole.
3. Land, which is by origin the property of the State, may be transferred to individuals or corporate bodies, with a view to rational and full use thereof, in accordance with the law.
4. The State shall respect and protect people's property, whether individuals or corporate bodies, and the property and ownership of land by peasants, without prejudice to the possibility of expropriation in the public interest, in accordance with the law.

Article 24 states that:

1. All citizens shall have the right to live in a healthy and unpolluted environment.
2. The State shall take the requisite measures to protect the environment and national species of flora and fauna throughout the national territory and maintain ecological balance.
3. Acts that damage or directly or indirectly jeopardize conservation of the environment shall be punishable by law.

Territorial Sea, Contiguous Zone and Exclusive Economic Zone Act (Lei sobre Águas interiores, Mar Territorial e Zona Económica Exclusiva), No. 21/92 of 28 August

This Act which is administered by the Ministry of Water and Energy regulates internal waters and lakes, the use of natural resources, the protection of the marine environment and the promotion of scientific marine research.

It specifies that the territorial sea extends up to twelve nautical miles from the low-water mark or straight baselines as indicated in Decree No. 47771 of 27 June 1967, or as may be defined by the Government of Angola under Article 3 of this Act. The Act further delineates the internal waters and the contiguous zone and establishes an exclusive economic zone (EEZ) of 200 nautical miles.

The remaining articles outline rights and obligations of the State of Angola with regards to the EEZ, particularly to rights of the Angolan Government to explore, use, conserve and manage natural resources.

Environment Framework Act (Lei de Bases do Ambiente), No. 5/98 of 19 June

Environmental legislation in Angola was outdated until the early 1990s, when a new State Secretariat for the Environment was established. This new Secretariat developed new strategies and policy approaches leading to the formulation of the Environment Framework Act in 1998. This act is based on Articles 12 and 24 of the Angolan Constitutional Law.

Administered now by the Ministry of Urban Affairs and Environment (established at the end of 2002), the Act provides the framework for all environmental legislation and regulations in Angola. It provides the definitions of key concepts including protection, preservation and conservation of the environment, the promotion of quality of life and the use of natural resources. The Act incorporates key international sustainable development declarations and agendas (e.g. Agenda 21), and also establishes citizens' rights and responsibilities.

Article 16 of the Act suggests seven steps that should be undertaken in the Environmental Impact Assessment (EIA) process, which can differ according to each situation and project, namely:

1. A brief non-technical description of the project;
2. A description of the activities to be undertaken;
3. A general description of the environmental situation at the proposed site;
4. A summary of the opinions collected in the course of the public consultation process;
5. A description of the possible environmental and social changes which the project may cause;
6. A list of the measures planned in order to eliminate or minimise any negative environmental or social impact;
7. A description of the systems planned for controlling and monitoring the proposed activity.

Clause 2 of this Article states that more specific legislation on EIAs will be developed by the Government. Article 17 deals with the issue of licensing and Article 18 with environmental auditing. These steps are based on the guidelines provided by the World Bank.

As an outcome of the Environment Framework Act and the Environmental Impact Assessment Decree, Article 14 as well as to implement the OPRC Convention a National Contingency Plan has been developed which will soon be approved by Government.

Environmental Impact Assessment Decree (Decreto sobre Avaliação de Impacte Ambiental) No. 51/04 of 23 July

This important Decree should ensure better environmental protection, particularly of human activities likely to have an impact on the environment (e.g. mining; civil construction; exploration of natural resources) by:

- Providing regulations to supplement the Environment Framework Act on EIAs, in particular on the procedures and mechanisms to be used in EIAs;
- Establishing norms for conducting an EIA of public and private projects which, due to their nature, dimension or location, might have significant environmental and social impacts; and
- Establishing which projects are to be subject to an EIA, what elements are to be included in an EIA, the nature and extent of public participation, the entity responsible for compliance with these legal requirements, and the EIA monitoring process.

Other important aspects of the EIA Decree include:

- Article 3: For a better understanding of the terminology used in this Decree it presents a number of definitions. These include environmental audit, environmental impact assessment, environmental impact study, public consultation, etc;
- Article 4/3: Indicates that projects aimed at national defense and security might be exempted from EIAs;
- Article 6/a-g: Indicates the kind of information that needs to be included in the EIA;
- Article 10: Explains the procedure for public consultation and indicates that the costs of such consultations should be covered by the project proponent;
- Article 16: Indicates what is considered to be an infraction to this Decree;
- Article 17: States that the penalties for the infractions vary from US\$ 1,000 to US\$ 1,000,000 and that apart from a financial penalty, other penalties can be applied;
- Article 22: States that the environmental audits shall be conducted.

The projects that need to be submitted to an EIA are divided into 7 groups and are presented in an annex to the Decree. These projects include (1) Agriculture, fishery and forestry; (2) Extractive industries, e.g. petroleum, mining, dredging; (3) Energy industry; (4) Glass industry; (5) Chemical industry; (6) Infra-structure projects; and (7) Other projects.

Draft National Environmental Management Programme (Draft do Programa Nacional de Gestão Ambiental) (PNGA)

The PNGA is seen as an important instrument for the achievement of sustainable development. Since 1993 stakeholders from government and civil society have been contributing to the document which is however still in draft form. The PNGA emphasises the need for implementing an environmental management strategy to protect the environment.

The PNGA proposes the establishment of an interministerial body for coordinating all sectoral environmental management activities which will contribute towards the "... exploration of natural resources, improvement of the economic environment, poverty alleviation and subsequent improvement of the quality of life and environment" (Ministério das Pescas e Ambiente, 2001). This Programme is to be implemented by the Ministry of Urban Affairs and Environment through its National Environmental Directorate.

Another aim of the PNGA is to work towards the harmonisation of all environmental legislation, particularly legislation in the petroleum and water sectors.

Sectoral

Petroleum Activities Act (Lei das Actividades Petrolíferas), No. 10/04 of 12 November

The previous Act No. 13/78 of 26 August with the same name has recently been revoked with the approval and publication of this new Act.

The new Act has been developed to include new principles of economic policies, particularly for the protection of national interests, promotion of the work force, valorisation of the mineral and environmental protection.

The Act establishes similarly to the revoked Act the exclusivity principle for the national petroleum concessionary SONANGOL. This means that SONANGOL has the rights to use natural resources but can establish partnerships with foreign companies.

Article 7/2 states that all petroleum operations must be conducted in a careful way, by considering the safety of people and infrastructure as well as the protection of the environment and conservation of the nature. Article 9/3 notes that the attribution of rights related to petroleum operations can only be granted if measures are out in place to ensure the sovereignty of the country, safety, environmental protection, research, management and preservation of natural resources, including the living and non-living aquatic biological resources.

Article 24 on Environmental Protection indicates that all companies, including SONANGOL, involved in petroleum operations have to put in place appropriate measures to ensure environmental protection with a view to guarantee its preservation which includes health, water, soil and sub-soil, air, biodiversity preservation, flora and fauna, ecosystems, landscapes, atmosphere and cultural, archaeological and aesthetic values.

For the above to be possible, Article 24/2 requires that plans on environmental preservation, environmental impact assessment, rehabilitation plans and environmental audits are submitted to the competent authorities within the established timeframes.

Geological and Mining Activities Act, No. 1/92 of 17 January

This Act aims to create the necessary conditions to include the development of the mining industry in the national and international context. The Act gives the Ministry of Geology and Mines the rights to manage and supervise all mineral prospecting and development activities through the granting of licences.

The Act also includes a clause (Article 12) on environmental protection that requires a commitment of licence holders (concessionaries) to protect the environment, fauna and flora and to recover any damaged soils and deviated water courses so as to avoid any adverse impacts on people. However, it does not explain how and what mechanism will be put in place to ensure that such commitments are fully met.

Decree on Environmental Protection for Petroleum Activities (Decreto sobre a Protecção do Ambiente nas Actividades Petrolíferas), No. 39/00 of 10 October

This Decree which is administered by the Ministry of Petroleum aims at protecting the environment from petroleum exploration and production activities. It defines the environment as including, *inter alia*, fauna, flora, soil, water, landscape, cultural values, atmosphere, etc. and is applicable to activities both off- and on-shore (Article 3).

In regulating petroleum activities in a way that ensures the achievement of sustainable development the Decree recognises the impact of these activities on the natural environment. It also calls for compulsory implementation of Environmental Impact Assessments (EIAs) as a key instrument to ensure environmental protection in any project. It provides details on the EIA process with an emphasis on the procedure for obtaining an environmental licence from the Ministry of Environment (Article 6).

The Government is currently developing complementary legislation to this Decree, namely on the management of operational discharges, management, collection and treatment of waste, and the procedures for the notification of oil spills.

Other

Fisheries Act (Lei das Pescas), No. 20/92 of 14 August

The main objective of this Act is to legislate, manage and control the fishing industry so as to adjust the fishing capacity in relation to the availability of marine resources, as well as to carry out scientific research on the marine environment. This Act is applicable to the territorial sea, contiguous zone and economic exclusive zone. The Fisheries Act consists of 66 articles which are aimed at regulating fishing in Angolan, including marine and interior waters. In this Act, fishery resources are considered to be of public use and also stipulate measures for the conservation of marine resources.

The conservation of marine resources is adjusted according to available fishing potential and season. This is done through decrees published by the Minister of Fisheries with a view to regulating the fishing industry towards achieving sustainable development. This Act prohibits the use of explosives, electrical gear and poisonous substances for fishing. It also considers serious offense to use inappropriate fishing gear, catch smaller or protected species, fish in restricted areas.

Biological Water Resources Act (Lei dos Recursos Biológicos Aquáticos), 2004

The Fisheries Act will be revoked by the recently approved Biological Water Resources Act when it has been published in the Government Gazette. The new Act is very comprehensive and detailed. It emphasises the need for policies aimed at preserving and regenerating the biological water resources. The Act is also a mechanism for the harmonisation of different legislation on the marine resources, particularly with regards to fisheries and aquaculture activities.

The Act considers the discharge of any objects or substances which are likely to cause serious damage to the biological resources as a crime. It further states that any individual or collective person that causes damage to the environment has to recover the damage and also indemnify the State.

The Act has been developed as part of the Government's policies towards environmental protection and sustainable use of natural resources. It has drawn on the Constitution and the Environmental Framework Act. The Act also considers international instruments such as the United Nations Law of the Sea (UNCLOS), Convention on Biological Diversity and SADC Protocol on Fisheries.

The biological water resources are considered in this Act to be important food sources for subsistence, economic activities and renewable resources. Title I deals with General Dispositions; Title II deals with Measures for the Protection of Biological Resources and Marine Environment; Title III focuses on Vessels, Procedures for Processing and Aquaculture; Title IV elaborates on the Institutions and Services for Biological Water Resources control; Title V deals with Responsibility; and Title VI concludes with Final and Transitory Dispositions.

The most important area of the Act in relation to environmental protection is Title II which deals in its five chapters with Measures for the Protection of Biological Resources and the Marine Environment. Moreover, there are other articles relevant for the present study. These are:

- Article 1: Deals with terminology used in the Act. It includes the description of 81 definitions such as aquaculture; biological diversity; endangered species; marine ecosystem; marine mammal; polluter-pays principle; precautionary principle; protected area; sustainable fishing; etc.
- Article 3: Presents the objectives of this Act which include, inter alia, to establish principles and rules for the protection of biological water resources and marine ecosystems, to promote the protection of the marine environment and coastal areas, to establish principles and rules for responsible fishing.
- Article 6/3: Recognises a number of important general principles for the conservation of the biological water resources, which include, for example, sustainable development; responsible fishing; optimal conservation and use of the biological water resources as well as the precautionary, prevention, user-pays and polluter-pays principles.
- Article 64: Introduces the objectives of Title II. Some of these objectives include to ensure the contribution of biological water resources for the social and economic development; to contribute to people's quality of life; to ensure the appropriate protection of the marine, water and coastal environment; to ensure the conservation and reproduction of endangered species; to prevent and/or mitigate the negative impacts of aquaculture in the marine ecosystems; etc.
- Article 79: Deals with the objectives of marine protected areas, which include the preservation of species, ecosystems and habitats, as well as its biological diversity; protection of cultural values; entertainment and tourism; scientific research; establishment of a network of areas for environmental protection.
- Article 80/a-e: Clarifies the five types of water protected areas. These include water integral nature reserves; water national parks; water nature reserves; partial reserves; and natural monuments.

- Article 90/2: Deals with the State obligations with regards to the use of fishing gear. The Ministry dealing with the fishery sector should promote environmental impact assessments on fishing methods and gear, particularly in relation to the introduction of new fishing technology.
- Article 105: Prohibits the use of explosives, toxic substances and electric fishing gear.
- Article 118: Deals with the protection of biological resources on the sea.
- Article 200: Presents the objectives of aquaculture, namely to contribute towards food security; sustainable regeneration of the biological water resources; regeneration of endangered species or rehabilitation of degraded habitats; and foster employment and financial return, particularly for the rural communities.
- Article 263: Clarifies what activities causing environmental degradation and damage to biological resources are considered crimes and subject to penalties.

Water Act (Lei de Águas), No. 6/02 of 21 June

In the development of this Act the Government of Angola has recognised that the previous water-related legislation was outdated, inconsistent with the current judicial, economic and social framework as well as new technical and scientific advancements in the water field. As a response to such issues this Act clarifies the priorities for water resources use in Angola, particularly in relation to internal waters (both surface and underground).

The Act states the priorities for the use of water resources in Angola, particularly in relation to interior waters both superficial and underground waters. It further notes that water resources are State property. Article 6 gives the right to the Ministry responsible for water affairs to ensure the preservation and conservation of areas of partial protection.

A number of principles of water management that shall be put into practice by the Government are described in this Act. These include: right for individuals and entities to access water; integrated management of water resources; institutional coordination and community participation; the harmonisation of the water management policy with land use planning and environmental policies; water as a renewable resource for people; the relationship between pollution and social and financial issues.

This Act encourages the development of a new administrative policy for the water sector which includes a decentralised system of control on the use of water as well as for the protection of water resources and the environment. In the implementation of such policy, the Government aims at achieving a number of objectives, namely to ensure access to water resources; to ensure a continuous balance between availability of waters resources and demand; to promote research activities and sustainable use of existent water resources; to ensure proper sewage systems and to regulate the discharge of domestic effluents.

The Act does not however cover pollution of sea water.

4.3 Institutions

Whilst a revision of institutions was not part of the TOR for this study, it was deemed appropriate to reflect briefly on the various institutions in the BCLME countries. Providing an analysis on the policies and laws without reflection on

those whose task it is to implement them, would be deficient. The study "Training and Capacity needs assessment for the BCLME" carried out by B.M. Clarke, M.T. Laros and L.J. Atkinson for the BCLME Programme provides an in depth assessment of institutional strengths and weaknesses. Our own assessment is thus deliberately superficial, highlighting the key points only.

Ministry of Urban Affairs and Environment (Ministério do Urbanismo e Ambiente)

In 1993 the National Secretariat for the Environment was established, which became In 1997 the Ministry for the Environment. In 1999 it was merged with the Ministry of Fisheries to become the Ministry of Fisheries and Environment. Finally in 2002 the current Ministry of Urban Affairs and Environment was formed.

The Ministry is responsible for overseeing urban affairs, and the environmental quality and conservation of biodiversity in Angola. As the key authority responsible for the implementation of the Environmental Framework Act and all associated regulations, the Ministry is also therefore responsible for the development and regulation of EIAs.

There is a close relationship between the Ministry of Environment and Urban Affairs, and other key ministries such as the Ministries of Petroleum, Geology and Mines, and Energy and Water but this requires strengthening. A Technical Multi-sectoral Commission for the Environment (*Comissão Técnica Multisectorial do Ambiente*) was established in 2001, which includes all directors of relevant departments. This was established to improve co-ordination and cooperation, but is only an advisory body. There is a proposal, which was put before the Commission in 2003, to establish a Council for Environment and Sustainable Development.

Ministry of Petroleum (Ministério dos Petróleos)

The Ministry of Petroleum is responsible for managing the petroleum resources of Angola and licensing of all related activities.

Within the Ministry, the National Petroleum Directorate (*Direcção Nacional dos Petróleos*) has industrial sector-specific responsibilities for nature conservation and environmental protection through its Department for the Protection of the Environment (*Departamento de Protecção Ambiental*). The Department is actively involved in the development of the National Contingency Plan (*Combate à poluição*) and its stated objective is to develop the mechanisms and instruments (legal and administrative), within the National Environmental Protection System (*Sistema Nacional de Protecção Ambiental*), to control activities in the petroleum industry.

Although routine management of petroleum operations rests with the state oil company, SONANGOL, exploration and production contracts are negotiated under the supervision and guidance of the Ministry of Petroleum. Furthermore, with the implementation of the forthcoming environmental legislation, the Ministry of Petroleum is set to become increasingly responsible for the review and approval of EIAs, environmental management systems, emergency response plans, and site abandonment and rehabilitation plans. For example, the Decree on Environmental Protection for the Petroleum Industry covers EIAs, oil spill prevention and response, waste management,

management of operational discharges and field abandonment and rehabilitation.

Ministry of Mining and Geology

This Ministry which regulates the prospecting and mining of minerals in Angola is involved mostly in the inland exploration of minerals, specifically in alluvial diamond fields. ENDIAMA, the state mining company has sole rights to prospecting, mining and marketing of diamonds in Angola. Currently there are no offshore diamond mining activities in the country.

The Ministry is responsible for ensuring compliance with environmental rehabilitation requirements. It has a National Mining Directorate which is responsible for the sustainable use of mineral resources and also controls the safety measures needed for workers.

Ministry of Fisheries

The Ministry of Fisheries is responsible for the conservation of marine resources. It has been established to, *inter alia*, protect and conserve marine resources, develop appropriate fishing plans, conduct scientific research on marine issues and indicate regularly the species that may be harvested. The new Biological Water Resources Act is administered by this Ministry. To assist with the enforcement of such legislation and to undertake scientific research on marine life, the Ministry established the Marine Research Institute (Instituto de Investigação Marinha (IIM)).

Ministry of Energy and Water

This Ministry is responsible for the planning, coordination, supervision and control of the activities related to the sustainable use of water and energy resources. It still has to develop strategies and programmes to facilitate people's access to energy and water resources.

The Water Act establishes a framework for the protection of water resources and establishes the Ministry of Energy and Water as responsible agency for water quality. This is a shared responsibility with the Ministry of Urban Affairs and Environment, which carries the overall responsibility for environmental quality in Angola.

Other Relevant Institutions

Apart from the above mentioned government institutions there are also a number of other institutions whose activities potentially impact, but to a lesser extent, the environment of the Benguela current system. These include the Ministry of Transport and Telecommunications, due to their role in authorising dredging activities and overseeing marine transportation along the Angolan coast, the Port Authorities in the provinces of Luanda, Lobito (Benguela) and Namibe, due to their involvement in overseeing activities related to mercantile marine, ship movements and ports, the Ministry of Defence, due to their military manoeuvres and use of explosives in the sea, as well as the Maritime Police which play an important role in controlling and patrolling the coast, particularly with regards to the protection of Angola's integrity and sovereignty.

5. NAMIBIA – NATIONAL POLICIES AND LEGISLATION

5.1 Introduction

Namibia's offshore is important for its fishing industry which is the second most important sector of the Namibian economy. Diamond mining and increasingly marine diamond mining provides the bulk of foreign exchange income of the country. Besides the Kudu gas field, which may be developed in the near future, there have been no further offshore discoveries of oil or gas.

Management of the environmental effects of mining and petroleum exploration and production activities on the marine environment is shared between the Ministry of Mines and Energy (MME), the Ministry of Environment and Tourism (MET) and the Ministry of Agriculture, Water and Rural Development (MAWRD). Environmental management is based on a Policy only as there is no legislation in place yet.

The Department of Water Affairs (DWA) in MAWRD is responsible for controlling pollution of the land environment and the marine environment from land-based sources through the current Water Act. A new draft Pollution and Waste Management Bill, to be administered by the Ministry of Environment and Tourism, has the potential to dramatically enhance control over environmental pollution by the petroleum and mining industry, but has not yet been submitted to Parliament.

Notwithstanding these legal deficiencies, the Ministry of Mines and Energy has developed in the Petroleum (Exploration and Production) Act, EIA requirements for each stage of petroleum industry activities, which are required prior to the authorisation of such activities, as well as regular reporting on quantity and quality of waste discharges.

5.2 Policies and Legislation

In this section, the various policies and laws relating to protection of the marine environment from mining, dredging and petroleum exploration and production activities are examined. Existing and emerging policies and laws are assessed in an attempt to provide a comprehensive analysis.

General environmental

Namibian legislation relevant to petroleum exploration and production consists of South African legislation, South West African legislation and Namibian legislation that has been passed since independence in 1990.

Nature Conservation Ordinance, 1975

This Ordinance will be replaced by the Parks and Wildlife Bill which includes provisions to declare protected areas and to protect against alien species.

Atmospheric Pollution Prevention Ordinance, No. 11 of 1976

Air pollution is controlled primarily by this Ordinance which deals with air pollution as it affects occupational health and safety issues if these are the subject of one of the conditions of a registration certificate issued under the

Ordinance. It considers air pollution from point sources but does not address ambient air quality.

Constitution of the Republic of Namibia, 1990

The Constitution is the supreme law in Namibia, providing for the establishment of the main organs of state (the Executive, the Legislature and the Judiciary) as well as guaranteeing various fundamental rights and freedoms. Provisions relating to the environment are contained in article 95, which is entitled “promotion of the Welfare of the People”. This article states that the Republic of Namibia shall – “*actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at ... maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for all Namibians, both present and future; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear waste on Namibian territory.*” Note, however this is a directive principle of state policy rather than a right, i.e. not directly enforceable.

While a number of pre-independence laws were expressly repealed, in accordance with article 140 of the Constitution all other laws in force immediately before the date of independence remain in force until they are repealed or amended by new legislation or are declared unconstitutional by a competent court. Many of the South African Acts that were applicable at the time of independence are thus still applicable. Many of them have been amended since, and a number of new laws has been passed or are nearing completion.

Territorial Sea and Exclusive Economic Zone of Namibia, No. 3 of 1990, amended by Act No. 30 of 1991

This Act determines Namibia’s territorial sea, internal waters, contiguous zone, Exclusive Economic Zone (EEZ) and continental shelf in conformity with international law.

It defines Namibia’s territorial sea as the sea within a distance of 12 nautical miles from baseline (the low water mark). It establishes Namibia’s internal waters as waters landward of its low water line or any other baseline.

The contiguous zone is established as the sea outside the territorial sea but within a distance of 24 nautical miles. In this zone Namibia may exercise any powers deemed necessary to prevent the contravention of any laws, for example on immigration. There appears, however, doubt whether present legislation gives the Police authority outside the territorial waters

In the 200 nautical mile EEZ established under the Act, Namibia may exercise powers to control the use and conservation of living marine resources. When it comes to exploiting non-living resources, such as minerals, including diamonds, and petroleum, the continental shelf is regarded as State land.

Namibia’s national development plans (NDP I and II) and long term development vision (Vision 2030)

Namibia’s first National Development Plan (NDP I) was prepared shortly after Independence, but was highly sectoral in its approach. Consequently, it was not successful in integrating the various sectors of the economy at a strategic

or programmatic level. This weakness was recognised by government. Based on the lessons learnt from NDP1 and the foundations laid by Namibia's Green Plan, an effort was made to incorporate environmental and sustainable development issues and options into the country's most recent National Development Plan (NDP II – for the years 2001 to 2006). In addition, Namibia's VISION for 2030 which has been described as “*a broad, unifying vision – epitomising the concept of sustainable development and moulded, to some extent, by Namibia's Green Plan and NDPII*” aims to help guide the country's five-year development plans from NDP III through to NDP VII and, at the same time, provide direction to government ministries, the private sector, NGOs and local authorities.

Namibia's Green Plan (1992)

Namibia's Green Plan was developed as an “inspirational” paper upon which sectoral and inter-sectoral programs could be built but has no legal status and is also not official Government policy. It opens with the statement “to secure for present and future generations a safe and healthy environment and a prosperous economy”. It provides guidelines for wise and sustainable use of living and non-living resources in Namibia including air, water and land, as well as guidelines for sustainability within the agriculture, fisheries, forestry, wildlife, tourism, mining, trade and industry sectors. It commits the Government of Namibia to among other things, subjecting all ministerial activities to an annual environment audit, encouraging major commercial and mining enterprises to undergo annual environmental audits, ensuring that independent environmental impact assessments form part of the pre-feasibility study of all development projects and subjecting all such projects to long-term regular environmental monitoring, and encouraging environmental awareness and education initiatives.

With respect to pollution, the Green Plan notes the need for new comprehensive legislation to address effluent treatment and disposal methods and standards, and also states that - “*more effective legislation is needed to control pollution. An awareness of polluter responsibility should be promoted and fines increased in line with current market values*”. The Green Plan also calls for, *inter alia*, the establishment of a national body to be responsible for waste management as well as the preparation and adoption of a national waste reduction plan, backed up by legislation. In respect of hazardous waste, the Green Plan notes that the most important shortcoming is the lack of effective legislation to control the disposal and processing of hazardous waste produced in Namibia.

Namibia's Environmental Assessment Policy for Sustainable Development and Environmental Conservation (1995)

The Ministry of Environment and Tourism published the Policy which was approved by Cabinet in 1995. This policy requires that all policies, programmes and projects, as listed in the Policy, whether they are initiated by the government or private sector, should be subject to an Environmental Assessment (EA). The Government of Namibia recognises that EAs are key tools to further the implementation of a sound environmental policy which strives to achieve Integrated Environmental Management (IEM). The Government also recognises that EAs seek to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process. In the context of IEM,

the term *environment* is broadly interpreted to include biophysical, social, economic, cultural, historical and political components.

The list of policies, programmes and projects requiring an EA is comprehensive and includes any policy, programme or project on the use of natural resources as well as structure plans, land acquisition for parks and reserves (including marine), mining and mineral exploration, ports and harbours, reclamation of land from the sea, salt works, mariculture, tourism and recreation facilities, effluent and desalination plants, to name but a few. The format and requirements for an environmental assessment are laid out in the policy. The purpose of the policy is seen as informing decision makers and promoting accountability, ensuring that alternatives and environmental costs and benefits are considered, promoting the user pays principle, and promoting sustainable development.

The principles set out to:

- better inform decision-makers;
- consider a broad range of options and alternatives when addressing specific projects;
- strive for a high degree of public participation and involvement;
- take into account the environmental costs and benefits;
- incorporate internationally accepted norms and standards where appropriate;
- take into account secondary and cumulative environmental impacts;
- promote sustainable development, and, especially to ensure that a reasonable attempt is made to minimise possible negative impacts and maximise benefits.

Draft Environmental Management Bill

The purpose of the Bill is to – “*give effect to Article 95(l) of the Namibian Constitution by establishing general principles for the management of the environment and natural resources; to promote the co-ordinated and integrated management of the environment; to give statutory effect to Namibia’s Environmental Assessment Policy; to enable the Minister of Environment and Tourism to give effect to Namibia’s obligations under international conventions.*”

The Bill sets out various environmental rights and duties: it ensures that proponents and decision makers can be held accountable to the public, and sets out the following list of principles for environmental management:

1. Renewable resources shall be utilised on a sustainable basis for the benefit of current and future generations of Namibians,
2. Community involvement in natural resource management and sharing in the benefits arising there from shall be promoted and facilitated,
3. Public participation in decision making affecting the environment shall be promoted,
4. Fair and equitable access to natural resources shall be promoted,
5. Equitable access to sufficient water of acceptable quality and adequate sanitation shall be promoted and the water needs of ecological systems shall be fulfilled to ensure the sustainability of such systems,
6. The precautionary principle and the principle of preventative action shall be applied,

7. There shall be prior environmental assessment of projects and proposals which may significantly affect the environment or use of natural resources,
8. Sustainable development planning shall be promoted in land use planning,
9. Namibia's moveable and immoveable cultural and natural heritage, including its biodiversity, shall be protected and respected for the benefit of current and future generations,
10. Generators of waste and polluting substances shall adopt the best practicable environmental option to reduce such generation at source,
11. The 'polluter pays' principle shall be applied,
12. Reduction, re-use and recycling shall be promoted, and
13. There shall be no importation of waste into Namibia.

The Bill also provides the Minister of Environment and Tourism with a range of general powers including the right to stop a person from "*Performing any activity or failing to perform an activity as a result of which the environment or any components thereof is or may be seriously damaged, endangered or detrimentally affected.*"

The Bill defines pollution as "*The direct or indirect introduction, as a result of human activity, of substances, vibrations, heat, radiation or noise into the air, water or land which may be harmful to human health or well-being or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment.*"

In terms of the draft legislation it will be possible to exercise control over certain listed coastal development activities and activities within defined sensitive areas. The listed activities in sensitive areas require an Environmental Assessment to be completed before a decision to permit development can be taken. The draft legislation describes the circumstances requiring Environmental Assessments. In *Schedule A* of the Bill, activities will be listed which require Environmental Assessment unless the Ministry of Environment and Tourism, in consultation with the relevant sector Authority, determines otherwise.

Section 3.2 of the draft Bill states that should one of the listed activities take place in, or have an effect on an area listed in *Schedule B*, an Environmental Assessment has to be carried out. No official list of sensitive areas exists at present, but a preliminary draft of such a list has been compiled. If it is determined that a project or development which is not included in Schedules A & B could have a significant impact on the environment, the Ministry of Environment and Tourism, in consultation with the relevant sector Authorities may require an Environmental Assessment under section 3.3 of the draft Bill.

Draft Pollution and Waste Management Bill

The purpose of this Bill is to regulate and prevent discharge of pollutants to the air, water and land in Namibia, and to enable the country to fulfil its international obligations in this regard.

With respect to water pollution, the draft Bill forbids any person from discharging or disposing of pollutants into any water or water course aside from the discharge of domestic waste from a private dwelling or the discharge of pollutants or waste to a sewer or sewage treatment works, without a water pollution licence.

The Bill provides for the issuing of water pollution licences. Such licence must specify the amount of pollutants that may be discharged over a specified period, the locations of pipes or structures from which discharges may take place, any treatment or pre-treatment to which pollutants must be subject to prior to discharge, the design, construction, operation and maintenance of any structures required to achieve this, requirements for monitoring and reporting of the amount and rate of discharges, and provision for seasonal and other variations that may occur in the amount of pollutants which may be discharged.

The Bill requires that the application for a water pollution licence must be accompanied by details of the activity to which the application relates, including the nature and location of the activity and its actual and potential effects on the environment. Members of the public must be given the opportunity to comment on all licence applications.

A registry of all licences issued will be maintained. Water protection works may be carried out to prevent or reduce the discharge of pollutants or waste into a water body or watercourse, to remove or dispose of the pollutant or waste, and to remedy, mitigate and restore waters or water courses, including dependent flora and fauna, to conditions existing prior to the pollution having entered the system.

The costs of such works can be recovered from the person or persons who caused the pollution to enter the system, unless they have been issued a licence in this regard. The Inspectors may be appointed for the purposes of this Bill, who have wide ranging powers in respect of monitoring compliance with the Bill, including the power to enter and search any premises or vehicle without a warrant or court order and to collect evidence as required.

Draft Parks and Wildlife Bill

Updated Parks and Wildlife legislation, superceding and repealing the pre-independence Nature Conservation Act of 1975, has been in preparation for some time now. The Parks and Wildlife Bill is expected to be tabled in Parliament soon. The new legislation will *inter alia*, enable the proclamation of marine reserves and generally improve the conservation of biodiversity in Namibia.

Sectoral:

Dumping at Sea Control Act, No. 73 of 1980

(Note: Enforced although never formally carried over from the time of the South African occupation. Furthermore, during the occupation no proclamation by the Administrator-General was ever made declaring it applicable in Namibia.

This Act implements the 1972 London Convention (Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter). It prohibits incineration at sea and severely restricts dumping at sea. The Act defined this term in the same way as it is defined in the Convention, and it includes the disposal at sea of petroleum production platforms and the like, and dredged material.

See further Chapter 6 – South Africa.

Prevention and Combating of Pollution of the Sea by Oil Act 1981 and the 1991 Amendment Act, No.24 of 1991

This Act provides a framework for the prevention and combating of pollution of the sea by oil and for determining liability in respect of loss or damage caused by the discharge of oil from ships, tankers or offshore installations. It is the enabling legislation for the Marpol 73/78 Convention signed and ratified by Namibia, but is limited to oil pollution.

In terms of this Act it is an offence to discharge oil from any ship, tanker or offshore installation except in an emergency, or as a consequence of damage or through accidental leakage, provided all necessary and reasonable steps have been taken to prevent this from happening. Any such discharge must be reported to the nearest port authority by the quickest means possible.

The Act grants the Minister of Works, Transport and Communication, extensive powers to take steps to prevent pollution of the sea where oil is being, or is likely to be discharged, including unloading, transferring, disposing, or burning the oil, moving, sinking or redirecting a ship, and to order any person, capable of doing so, to render assistance in cleaning up the oil. It also allows for inspection of ships or tankers and of their records in the event that there is reasonable grounds to suspect that an offence has been committed, and for taking of samples of oil for the purpose of preventing discharge of oil from the vessel. It provides for entry onto any land for purposes of, or connected to, the cleanup of spilled oil.

The Act also stipulates that liability for loss, damage or costs, caused by discharge of oil, resides with the owner of the vessel from which it was spilled except in the event of war, terrorism or negligence on the part of the government or its officials. Insurance against liability for loss, damage or costs is compulsory for owners of any vessel transporting or carrying more than 2 000 tons of oil. The Act also empowers the Minister to detain any ship responsible for an oil spill until sufficient funds are deposited or a guarantee is furnished to cover the costs of cleanup. A pollution safety certificate is required for the operation of any offshore installation, but we have no knowledge whether this requirement is implemented.

The Act also provides for a State Revenue Fund into which any revenue derived in terms of this Act must be paid, which can be used for conducting any research connected with the pollution of the sea by oil, or for any action required for preventing or removing oil in or discharged from a ship or offshore installations. We have again no knowledge whether this Fund has been implemented.

Petroleum (Exploration and Production) Act, No. 2 of 1991, as amended

The Act stipulates that all rights in relation to exploration for, production and disposal of petroleum, vests in the State. The Act states in Article 12 that the Minister in considering a licence application may require the applicant to carry out environmental impact studies. It provides for the issuing of licences for reconnaissance, exploration and production of petroleum, and in Article 71 for the control of environmental pollution caused by such activities.

In accordance with the Act a Petroleum Agreement is established between the Government of Namibia (Ministry of Mines and Energy) and the licence

applicant. Clause 11 of such Petroleum Agreement deals with environmental protection and binds the license holder to all provisions contained in the Act, as well as requiring the license holder to comply with some fairly stringent environmental requirements:

“The Company undertakes to take all necessary and adequate steps – (b) to minimise environmental damage to the licence area and adjoining or neighbouring lands.

The measures and methods to be used by the Company for purposes of complying with the terms of paragraph (b) of clause 11.3 shall be determined in timely consultation with the Minister upon the commencement of petroleum operations or whenever there is a significant change in the scope or method of carrying out petroleum operations, and the Company shall take into account the international standards applicable in similar circumstances and the relevant environmental impact study carried out in accordance with clause 11.7.

The Company shall cause a person or persons, approved by the Minister on account of their special knowledge of environmental matters to carry out two environmental impact studies, in order –

- (a) to determine the prevailing situation relating to the environment, human beings, wildlife or marine life in the licence area and in the adjoining or neighbouring areas at the time of the studies; and*
- (b) to establish what the effect will be on the environment, human beings, wildlife or marine life in the licence area in consequence of the petroleum operations to be made under this Agreement, and to submit for consideration by the parties measures and methods contemplated in clause 11.6 for minimising environmental damage and carrying out site restoration in the licence area.*

The studies mentioned in Clause 11.7 shall contain proposed environmental guidelines to be followed in order to minimise environmental damage”

The first of these EIAs is required to be carried out in two parts - a baseline study to be undertaken prior to a seismic survey, followed by an environmental impact assessment of the effects of drilling on the environment. The second of the EIAs constitutes an assessment of the effects of production on the environment. These EIAs are required to contain environmental guidelines to be followed in order to minimize environmental damage including (but not limited to) marine resource protection, fuel storage and handling, liquid and solid waste disposal, selection of drilling sites, blowout prevention, combating oil spills, flaring, well abandonment, rig dismantling and site completion, reclamation and noise control.

Conditions imposed on the holders of these licences include not interfering with fishing or marine navigation, preventing the waste or spilling of any other substance extracted from a well (including for example drilling fluid and drill cuttings, and production water) and prevent pollution of any water area (including estuaries, harbours, river, etc.) by any of the above material. Flaring is only allowed during short periods for well testing.

Applicants for production licences must comply with more stringent requirements including stipulating the manner in which they intend preventing

pollution, dealing with waste, safeguarding natural resources, and reclaiming and rehabilitating land disturbed by production operations, as well as providing a statement setting out any significant effect production operations are likely to have on the environment and the manner in which they intend controlling or eliminating this effect.

If a licence holder relinquishes their right, or if such a right lapses or is cancelled, the holder is required to remove all goods brought into the licence area, to plug or close off any wells drilled, and to perform any actions specified by the Minister required for the protection of natural resources in the area.

The Petroleum Laws Amendment Act, 1998 introduces decommission plans and requires the establishment of a trust fund for such decommissioning on cessation of production operations after 50% of the petroleum reserves have been produced.

Minerals (Prospecting and Mining) Act, 1992

This Act controls all mining activity in Namibia. Mineral rights are vested in the state, and companies or individuals are required to apply to the Ministry of Mines and Energy (MME) for licences to explore and mine mineral deposits.

In the event that a mineral licence lapses, is cancelled or the holder of the license abandons a license area (including reconnaissance, prospecting, retention or mining areas), they are required to take all necessary steps to remedy, to the satisfaction of the Minister, any damage caused to the environment by their activities.

The Act also requires that the holder of a mineral licence to report any incidence in which any mineral is spilled in the sea or on land or if such land becomes polluted or if any damage is caused to any plant or animal, to the Minister of the MME and to take whatever steps are considered necessary in terms of good practice to remedy the situation. If the license holder fails to comply with this in good time, the Minister has the right to take whatever steps are necessary to remedy the situation, at the expense of the licence holder.

Following Cabinet approval and Parliament endorsement of the Minerals Policy of 2003 a new Minerals Bill is being prepared which introduces requirements for financial guarantees for reparation of environmental damage and the setting up of trust funds for rehabilitation after mine closure. Specification of these requirements will be contained in yet to be drafted Regulations. Penalties for non-compliance are also included.

Namibian Ports Authority Act, No. 2 of 1994

In terms of this Act Namport is responsible for “protecting the environment” within its demarcated area of control. Although open-ended, the Act does afford Namport the power to monitor and regulate activities within the ports and adjacent bays. However, there may be uncertainty as to who is responsible for enforcing this as the Ministry of Fisheries and Marine Resources has overall responsibility for all living marine resources and the Ministry of Agriculture, Water and Rural Development responsibility for water quality and marine pollution from land-based sources.

White Paper on Energy Policy (1998)

Namibia's Energy Policy as outlined in this White Paper recognises that there is a close interaction between energy and the environment and that energy related activities (from investigation through production to consumption) can impact on the environment. It recognises further that the MME has neither the capacity nor resources to attend to the potential effects of all of these aspects on the environment, and as such, has elected to focus on four energy-environment challenges, being the assessment of energy related projects, woodland depletion, household health, and its own institutional capacity for environment-related activity. With respect to assessment of energy projects the white paper commits the government, to coordinate and work with the MET, Ministry of Fisheries and Marine Resources (MFMR) and other ministries, in requiring and enforcing EIAs for all major energy-related projects, policies and programmes having potential impact on the natural environment, and in taking account of environmental and social costs of new energy projects when deciding about such projects.

Policy for prospecting and mining in Protected Areas & National Monuments (1999)

This policy is essentially a "popularisation" of current legislation regarding mining and nature conservation. The policy aims to sensitize various stakeholders about the importance of conservation and tourism, and about the fact that many of the country's parks (especially the coastal areas) are extremely sensitive. In this context, it urges for environmentally-responsible mining.

The policy recognises the right of the State to issue prospecting and mining licenses in protected areas, but it urges MME not to encourage the exploitation of low-value minerals and dimension stone in parks. It reflects on Namibia's EA policy and urges for intersectoral collaboration where prospecting and mining is allowed in parks.

So far no marine protected areas have been proclaimed.

Regulations relating to the Health, Safety and Welfare of persons employed, and protection of other persons, property, the environment and natural resources, in, at or in the vicinity of exploration and production areas, 1999

Article 2 of the Regulations requires operators, with due regard to good oil field practices, to provide such funds and take any such measures as may be necessary so as to ensure the protection of the environment and natural resources in, at or in the vicinity of such area from hazards arising from petroleum activities. And the carrying out of any environmental impact assessment studies provided for in the petroleum agreement.

Article 74 requires the operators of petroleum exploration and production licences, in the event of any pollution by the spilling of petroleum arising from the petroleum activities, to ensure compliance with their oil spill contingency plan and to ensure that the pollution of the environment and the coast line are prevented or limited, if it is not possible to prevent such pollution.

Minerals Policy of Namibia (2003)

The Policy sets out guiding principles for the development of the mining sector designed to ensure that it maintains its leading role in the growth of the national economy while at the same time operating within environmentally acceptable limits. To this end, one of the objectives of the policy is listed as ensuring compliance with national and other relevant environmental policies. It recognises that some prospectors and mining companies have in the past, shown little respect for the environment and as a result have caused significant adverse environmental impacts. The Policy therefore commits MME to ensuring that the development of the mining industry proceeds on an environmentally sustainable basis, that mineral development in proclaimed protected areas commences only when rehabilitation is guaranteed, to investigating the establishment of financial mechanisms (environmental trust funds or bonds) for environmental rehabilitation and aftercare in other areas, and to developing national waste management standards and guidelines in consultation with the mining industry. It stipulates that the government will enact exploration and mining legislation benchmarked against environmental global best practice, that it will investigate the establishment of mandatory mechanisms for funding of final mine closure plans (including rehabilitation) and that it will monitor industry compliance with this through the use of Environmental Management Plan (EMP) contracts.

In respect of the marine mining sector, the Policy requires that the government in consultation with stakeholders, establish an Environmental Assessment Working Group and develop a framework for the generation of Environmental Management Programme Report guidelines, and that MME in consultation with MET and MFMR ensure that all mining vessels be equipped with Vessel Monitoring Systems (VMS), which collectively, will help to avoid cumulative and collective damage to the environment.

This policy also commits the Government of Namibia to the implementation of the SADC treaty and SADC Protocol on Mining and to encouraging other SADC member states to ratify all environmental conventions appropriate to the mining industry in the region.

Draft Gas Bill

The aim of the Gas Bill is to promote the establishment of a downstream gas transportation and distribution network in Namibia for the purposes of domestic supply and for export; to establish a framework of licensing for the gas industry and a national gas regulator to monitor the performance of licence conditions and promote reliability of service; to ensure safety, efficiency and environmental responsibility in the transportation and distribution of natural gas; to facilitate investment in pipeline infrastructure by private, public, municipal and mixed owned enterprises; to promote a competitive market in gas in the long term, and to stimulate cross-border trade in gas between Namibia and its neighbours.

There appears to be potential for overlap between this Bill and the Petroleum (Exploration and Production) Act, as e.g. it may be interpreted that upstream pipelines could be covered by both Bill and Act.

For granting a licence the Minister shall give due consideration to possible damage to the environment and may require EIA to be carried out. Licences can be revoked because of failure to comply with official Namibian

Government environmental standards. Provisions should be made for the proper restoration of the operating environment to its natural condition, with plans for pipeline decommissioning to be submitted according to the environmental laws and appropriate regulations.

Other

Sea-shore Act, No. 21 of 1935

This Act is the same as the South African Seashore Act which is discussed in Chapter 6 - South Africa.

Seashore Ordinance, No. 37 of 1958

The Sea Shore Ordinance is very similar to the Sea-shore Act, discussed above. It makes provision for the definition of the seashore, high water and low water marks, and empowered the former Administrator of Namibia (during the South African occupation) to make regulations concerning the use of the seashore, including regulations regulating the deposit or discharge of rubbish and the like on the seashore or in the sea within 3 nautical miles offshore. This Ordinance does not appear to have been implemented nor have regulations been made under it.

Water Act, No. 54 of 1956

This is the principal law dealing with water pollution in Namibia. The Act is administered by the Department of Water Affairs (DWA) within the Ministry of Agriculture, Water and Rural Development (MAWRD).

It is a criminal offence in terms of the Act (section 22) to – *“Pollute freshwater or the sea in a way that makes the water less fit for any purpose for which it is or could be used by people, including use for the propagation of fish or other aquatic life, or use for recreational or other legitimate purpose.”*

The Act requires that water used for industrial purposes be purified before it is returned to a public stream or the sea, so as to conform with requirements established by the Minister of Agriculture, Water and Rural Development, but may be exempted from doing so, subject to certain conditions. The Minister in this instance may issue a permit to allow the discharge of waste water, effluent or waste in a un-purified or semi-purified state into a public stream, subject to such conditions that it does not cause pollution of “public or other water, including sea water” or provided that the discharge point is sufficiently close to the sea that no person will be prejudicially, and no aquatic or marine life detrimentally, affected by such discharge.

Penalties for conviction of an offence in terms of the Act are relatively low. Conviction for a first offence, for example, attracts a fine not exceeding N\$2000 or imprisonment for a period not exceeding 6 months, or both, while the fine for a second offence attracts a fine of not less than N\$1000 or 6 months imprisonment or both.

The definition of pollution is missing from this Act, which is a significant omission.

Whilst the existing Act covers only marine pollution from land based sources, and is therefore of little consequence for the activities under this study, the

new draft *Water Resources Management Bill* does not appear to cover the water quality of the marine environment either.

Marine Resources Act, No. 27 of 2000

This Act is designed to provide for the conservation of the marine environment in Namibia, for the responsible utilisation, protection and promotion of marine resources, and for control over marine resources. This act replaces the Sea Fisheries Act, 1992 and the Sea Birds and Seals Protection Act, 1973. It provides for the appointment of fishery inspectors and observers, for the establishment of a Fishery Observer Agency, a Marine Resources Advisory Council, and a Marine Resources Fund. It lists requirements for commercial harvesting of resources and measures for the management and control of fisheries.

The Act allows in Article 51 for the establishment of Marine Reserves, while Article 52 imposed penalties on dredging or extraction of sand and gravel in Marine Reserves, discharges or deposits waste or any other polluting matter and discharges in Namibian waters of anything which may be injurious to marine resources or which may disturb the ecological balance.

5.3 Institutions

This section contains a brief reflection on the various institutions which have responsibilities for the marine environment.

Ministry of Environment and Tourism (MET)

Management of the environmental effects of mining and petroleum exploration and production activities on the marine environment is at present shared between the Ministry of Mines and Energy (MME), the Ministry of Environment and Tourism (MET), the Ministry of Fisheries and Marine Resources (MFMR) and the Ministry of Agriculture, Water and Rural Development (MAWRD). Greater responsibility is, however, likely to be transferred to the MET when the Environmental Management Bill is passed by Parliament and gazetted.

The Directorate of Environmental Affairs (DEA) is one of four directorates under MET. The DEA lists as its responsibility, the maintenance of ecosystem health and maintenance of biological diversity in Namibia. It describes its mission as being to "Promote environmental protection, environmental planning and environmental coordination to support the sustainable and equitable use of natural resources and national development, and to protect the environment and human welfare from unsustainable, unhealthy and inappropriate practices".

Ministry of Mines and Energy (MME)

This Ministry is the lead agency responsible for ensuring that mining activities in Namibia are environmentally sustainable, issues prospecting and mining licences as well as exploration and production licences for petroleum. The Ministry administers the Minerals Act and the Petroleum (Exploration and Production) Act.

Ministry of Agriculture, Water and Rural Development (MAWRD)

The Department of Water Affairs (DWA) in MAWRD is responsible for controlling pollution of the land environment in Namibia through the Water Act of 1956.

The Directorate of Resource Management within the Department of Water Affairs (DWA) at the MAWRD is currently the lead agency responsible for management of marine pollution that originates on land. Management and prevention of water pollution is based on a permit system administered by the DWA. The Department grants exemption permits allowing businesses and other institutions such as local authorities to discharge effluent into the surroundings. These exemption permits allow institutions to discharge effluent that is not in compliance with the standards set forth (in this case the 1962 Water Quality Guidelines).

Water pollution licences are required by any mining company wishing to discharge effluent to the environment. This includes the disposal of fines material generated by the diamond mining industry that is discharged to sea from shore based processing plants. The area of responsibility does not include the large number of mining vessels operating in the offshore concession areas. The new draft Pollution and Waste Management Bill has the potential to dramatically enhance control over environmental pollution by the mining industry.

Ministry of Works, Transport and Communication (MWTC)

The Directorate of Maritime Affairs (DMA) in the MWTC plays a role with respect to management and prevention of pollution of the maritime environment, being responsible for marine oil pollution that arises from shipping activities. Its activities in this respect are administered through the Prevention and Combating of Pollution of the Sea by Oil Act, 1991. Responsibilities of the DMA include oil pollution prevention and control.

The National Response Team (NRT) of the National Oil Spill Contingency Organisation (NOSCO), situated within MWTC, is the responsible agency for managing and co-ordinating national response to an oil spill in Namibia in the latest National Oil Spill Contingency Plan prepared with the aid of the International Maritime Organisation. Roles and responsibilities for this and other state, parastatal and non-government organisations in Namibia are defined within this document which is not completely finalised.

Ministry of Fisheries and Marine Resources (MFMR)

The Marine Resources Act states that this Ministry has jurisdiction over all living creatures in the marine environment. The Act provides the Ministry with significant powers to safeguard the marine environment. The Ministry assists with the evaluation of EIAs for activities in this environment.

Namibia Ports Authority (Namport)

Responsible for operation of ports of and pollution control in Walvis Bay and Lüderitz within demarcated areas. This responsibility for this control has however to be shared with the Ministry of Fisheries and Marine Resources, and the Ministry of Agriculture, Water and Rural Development.

6. SOUTH AFRICA – NATIONAL POLICIES AND LEGISLATION

6.1 Introduction

The Maritime Zones Act 15 of 1994 defines the various maritime zones claimed by South Africa in accordance with UNCLOS and specifies the extent to which South African laws apply within each zone (this is discussed more fully below). The Maritime Zones Act adopts the definition of “continental shelf” in Article 76 of UNCLOS and specifies that the continental shelf shall, for the purposes of any law relating to the mining of precious stones, metals or minerals, including natural oils, be deemed to be unalienated State land.³ Any laws in force in South Africa, including the common law, applies on, and in respect of, installations such as pipelines, exploration and production platforms or vessels used for prospecting and mining, that are situated within South Africa’s internal waters, territorial waters, exclusive economic zone (“EEZ”) or continental shelf.⁴

The Minister of Minerals and Energy Affairs and the Department of Minerals and Energy (DME) for which the Minister is responsible, administers all laws, policies, guidelines and other matters relating to mineral and energy, both on land and offshore. It is likely that petroleum industry matters will be delegated to the Petroleum Agency of South Africa during 2005.

The DME is also the organ of State responsible for regulating the environmental impacts of all phases of mining and petroleum production but usually exercises its powers after consultation with other relevant organs of state. In relation to marine mining, petroleum exploitation, and dredging these consultees should, in most instances, include: the Department of Water Affairs and Forestry, the Department of Environmental Affairs and Tourism (DEAT) (specifically the Marine and Coastal Management Branch) and affected municipalities. Draft environmental impact assessment regulation to be made under the National Environmental Management Act No. 107 of 1998 (NEMA) envisage that DEAT would have concurrent responsibility for evaluating the environmental impacts of mining operations and for granting environmental authorisations.

The Minerals and Petroleum Resources Development Act, No. 28 of 2002 (MPRDA) which came into force on 1 May 2004⁵ and the regulations made under it, are the most important legislation pertaining to the minerals industry (The MPRDA repealed most of the Minerals Act, No. 50 of 1991). The MPRDA requires an Environmental Management Plan or Programme Report (EMP) to be prepared and approved prior to the commencement of any operations.⁶

DEAT is responsible for maintaining the quality of the marine environment and for combating marine pollution below the high water mark.⁷ The Department of Transport has delegated national responsibility for the prevention of marine pollution from vessels to the South African Maritime Safety Authority

³ Maritime Zones Act, section 8.

⁴ Maritime Zones Act, section 1.

⁵ Government Notice R25 in Government Gazette 26264.

⁶ MPRDA, section 5(4).

⁷ The responsibilities for combating marine pollution lies within the Marine and Coastal Management Branch, Chief Directorate: Resource Management, Directorate: Integrated Coastal Management and Development, Sub-Directorate: Marine and Coastal Pollution Management.

(SAMSA). The Department of Water Affairs and Forestry (DWAf) is responsible for the management and regulation of freshwater resources and estuaries in South Africa. DWAf also regulates the discharge of effluent through marine outfalls although it is not expressly authorised to do so by the National Water Act. Local municipalities within the Northern and Western Cape are responsible for monitoring marine effluent discharges and reporting on these to DWAf. Municipalities do not play an active role in the management or mitigation of land-based sources of marine pollution which means that there is minimal management of diffuse sources of pollution (e.g. storm water runoff), which may have a significant cumulative impact on marine water quality along the coastline.

The absence of a clear mandate for a particular organ of State (e.g. DEAT) to take the lead in co-ordinating all aspects of marine pollution management and a general lack of capacity (particularly in relation to monitoring seawater quality and enforcing permit conditions for marine outfall pipes) has meant that there is very limited monitoring and control of marine pollution from land-based sources. The provincial governments of the Northern and Western Cape implement very limited, control or monitoring functions in relation to marine pollution.

6.2 Policies and Legislation

General environmental

Environmental Conservation Act, No. 73 of 1989

The Environment Conservation Act (ECA) was originally passed to provide for the effective protection and controlled utilisation of the environment. Although many of its provisions have since been repealed by the National Environmental Management Act No. 107 of 1998 (NEMA), the Environmental Conservation Act continues to play an important role. In particular, most environmental impact assessments are conducted under the ECA in accordance with the Environmental Impact Assessment Regulations (“the EIA Regulations”) made under the ECA, which are discussed below.

The ECA also gives wide powers to government authorities to issue directives in circumstances in which the authority believes that the environment is being, or may be, seriously damaged, endangered or detrimentally affected. The directives may require the person responsible to take specified measures to eliminate, reduce or prevent the damage, danger or detrimental effect.⁸

The ECA also makes provision for the declaration of protected natural environments, including that within territorial waters⁹, but these provisions will be repealed by the Protected Areas Act, No. 57 of 2004 when it enters into force.

Maritime Zones Act, No. 15 of 1994

The Maritime Zones Act defines South Africa’s rights and the application of South African law to its maritime zones, namely: internal waters; territorial waters, contiguous zone, maritime cultural zone, exclusive economic zone (EEZ) and the continental shelf. The Act stipulates that the Republic of South

⁸ ECA, section 31A.

⁹ ECA, Sections 16, 17 and 18.

Africa may take the necessary measures to protect the coastline or related interests, including fishing, from pollution or any threat of pollution resulting from a maritime casualty, which may be expected to result in major harmful consequences.¹⁰

The laws of South Africa, including the common law, apply in full within the internal waters and territorial waters (which extend seaward to a distance of 12 nautical miles from the baselines along the coast) and South Africa claims the same rights and powers in relation to natural resources within its exclusive economic zone (EEZ), which extends seaward to a distance of 200 nautical miles from the baselines along the coast, as it has within its territorial waters.¹¹ As discussed above, any laws in force in South Africa, including the common law, applies on, and in respect of, installations. The term “installations” includes pipelines, exploration and production platforms or vessels used for prospecting and mining, and vessels or appliances used for the exploration or exploitation of the seabed, that are situated within South Africa’s internal waters, territorial waters, EEZ or continental shelf.¹²

Constitution of the Republic of South Africa, Act No. 108 of 1996

The Constitution of the Republic of South Africa is the supreme law in South Africa. The Constitution includes an environmental right¹³ which states that:

“Everyone has the right (a) to an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

The Constitution defines the powers and competencies of the national, provincial and local spheres of government. Marine resources specifically, are the responsibility of national government, but the Constitution emphasises the need for co-operative governance, and the need to devolve management functions to the lowest sphere of government able to undertake them. Both the national and provincial spheres of government are competent to deal with a range of issues relevant to coastal management including: the environment, nature conservation, agriculture, disaster management, housing, pollution control, regional planning and development, tourism and urban and rural development.

White Paper on Environmental Management Policy (1997)

This White Paper sets out the government’s overall policy on environmental matters and the National Environmental Management Act (NEMA) was enacted to give effect to it.

¹⁰ Maritime Zones Act, section 10.

¹¹ Maritime Zones Act, section 7.

¹² Maritime Zones Act, section 1.

¹³ Section 24 of the Bill of Rights.

EIA Regulations (September 1997)

The EIA regulations (made under the ECA) specify how EIAs must be conducted in relation to a list of activities identified by the Minister as having a potentially detrimental effect of the environment. The regulations require that an EIA must be undertaken, among other situations, where there is any proposed construction or upgrading of facilities below the high water mark. The regulations must be read in conjunction with the minimum requirements for environmental assessments set out in section 24(4) of NEMA. These regulations will remain in force until new regulations (which have been published in draft form for public comment) are promulgated under NEMA.

National Environmental Management Act, No. 107 of 1998

The National Environmental Management Act (NEMA) is South Africa's overarching environmental statute. The Act emphasises the principle of co-operative governance and ensures that the environmental rights provided for in the Constitution are protected and fulfilled. It establishes a framework to implement the White Paper for Environmental Management Policy for South Africa. Although the Act requires the lead agent, the Department of Environmental Affairs and Tourism (DEAT), to ensure effective custodianship of the environment, it also acknowledges that the State alone is unlikely to be able to manage the environment effectively. The scope for public involvement in environmental management is provided for in the Act, which includes the ability to institute private prosecutions and gives the public the ability to participate in the management of the environment. The Act also makes provision for the making of regulations in order to carry out the purposes and provisions of NEMA.

The Act aims to improve the quality of environmental decision-making by setting out principles for environmental management that apply to all government departments and organisations that may affect the environment. NEMA also creates a framework for facilitating the role of civil society in environmental governance. A guideline document to NEMA has also been published (DEAT 2000)

Section 2(1) of Act sets out a range of environmental principles that must be applied by all organs of state when taking decisions that significantly affect the environment. One of the key principles is that all development must be socially, economically and environmentally sustainable and that environmental management must place people and their needs at the foreground of its concerns, and serve their physical, psychological, cultural and social interests equitably.

Chapter 5 (sections 23 and 24) of the Act outlines the objectives of Integrated Environmental Management (IEM). IEM provides a framework for the integration of environmental issues into the planning, design, decision-making and implementation of plans and development proposals. The principles of IEM underlie the approach to this EIA.

NEMA has recently been amended¹⁴ to require that an environmental impact assessment process must be followed and an environmental authorisation obtained in order to undertake certain "listed activities" or to continue with

¹⁴ National Environmental Management Amendment Act, No. 8 of 2004, which commenced on 7 January 2005 (Proc R1 in GG 27161 of 6 January 2005).

certain other identified activities. Draft EIA regulations have been published that identify various mining activities and if these regulations are brought into force in their current form, they will have the effect of requiring these activities to be subjected to EIA processes. The activities listed as requiring a full EIA include: “the mining, quarrying, prospecting, extraction or production, including associated structures and the extension of existing operations, of – (a) ferrous and base metals, (b) precious metals; (c) coal; (d) diamonds; (e) heavy minerals; (f) asbestos; (g) industrial minerals; (h) gemstones; (i) clay; (j) silica; or (k) dimension stone”.¹⁵ A more limited EIA process must be followed in respect of “the decommissioning of mining, quarrying, prospecting or other mineral extraction operations that commenced before 1991”.¹⁶ The draft regulations also provide that the environmental assessments produced for the purposes of the EIA regulations shall be deemed to comply with the requirements of the Mineral and Petroleum Resources Development Act, No. 28 of 2002, provided that the DME’s requirements have been taken into account prior to approving any process or accepting any document in the environmental assessment process.¹⁷

NEMA has repealed most of the Environmental Conservation Act, No. 73 of 1989, but the sections regulating EIAs will remain operative until the new EIA regulations under NEMA are brought into force.

Protected Areas Act, No. 57 of 2003

This Act came into force on December 2004. An amendment Bill has already been published. The Act establishes a system of protected areas, sets out the various categories of protected area, and describes how these should be established and managed. The Act applies throughout South Africa and within the EEZ and continental shelf, and is intended to be interpreted and applied with both NEMA and the National Environmental Management: Biodiversity Act.

The proposed amendments to the Act will have the effect of recognising marine protected areas (MPAs) established under the Marine Living Resources Act as a separate category of protected areas. Chapter 1 (Interpretation, objectives and application); chapter 2 (System of Protected Areas); and section 48 (Prospecting and mining activities in protected area) apply to MPAs, but the rest of the Act does not apply unless the MPA in question has been incorporated into a larger protected area, such as a World Heritage site.

The amended version of section 48 will prohibit commercial prospecting or mining activities in various protected areas, including MPAs. It also provides that these activities may not take place within a protected environment (defined in the Act), without the written permission of both the Minister of Environment and the Minister responsible for mineral and energy affairs. The section also requires the Minister for Environment (after consultation with the Minister responsible for mineral and energy affairs) to review existing commercial mining and prospecting activities within these areas, and if appropriate, to prescribe conditions under which those activities may continue in order to reduce or eliminate the impact of those activities on the environment or for the environmental protection of the area concerned. In

¹⁵ Draft regulation 23(6)

¹⁶ Draft regulation 22(24)

¹⁷ Draft regulation 36.

doing so, the Minister is required to take into account the interests of local communities and the environmental principles set out in NEMA.

National Environmental Management: Biodiversity Act, No. 10 of 2004

Most parts of this Act came into force on 1 September 2004. The *National Environmental Management: Biodiversity Act* (“the Biodiversity Act”) applies through out the country, including within South Africa’s territorial waters, EEZ and continental shelf¹⁸ and is intended to give effect to the Convention on Biodiversity and other international agreements affecting biodiversity that have been ratified by South Africa.¹⁹

Among other matters, the Act:

- establishes a South African National Biodiversity Institute to assist in achieving the objectives of the Act;
- establishes a national planning framework for biodiversity²⁰ which must be integrated into other spatial and development plans, including the integrated development plans prepared by municipalities;
- provides for the designation of various categories of threatened or protected ecosystems and species, and includes measures to protect them and to control trade in endangered species;²¹
- includes measures to prevent and combat the spread of alien and invasive species²² and to compel EIAs to be done in relation to certain genetically modified organisms; and
- regulates bio-prospecting and benefit sharing.

Sectoral

Dumping at Sea Control Act, No. 73 of 1980

The Dumping at Sea Control Act implements the Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter, 1972, (known as “the London Convention 1972”). It provides for the control of dumping at sea of scheduled substances. The Act declares it a criminal offence to deliberately dispose at sea any substance listed in schedules of the Act, which include persistent plastics and other persistent synthetic materials. The Act schedules prohibited substances and those substances requiring permits to be disposed of at sea (restricted substances) and sets out guidelines in this regard. The Act details general considerations to be taken into account when the Minister grants a permit and lists the possible effects on marine life, fish and shellfish culture, fish stocks and fisheries and seaweed harvesting and culture here. A further aspect identified to be considered is the possible effects on other uses of the sea e.g. protection of areas of special importance for scientific or conservation purposes.

¹⁸ Section 4.

¹⁹ Sections 2 and 5.

²⁰ It is envisaged that this will include: a national biodiversity framework; bioregional plans (supported where appropriate, by agreements with neighbouring countries), biodiversity management plans for particular ecosystems, indigenous species or migratory species; biodiversity management agreements.

²¹ Chapter 4.

²² Pursuant to section 65 (as read with the definitions of “alien species” and “restricted activity” in section 1), no person may import, or introduce from the sea, any species beyond its natural range, without a permit issued in accordance with chapter 7.

This Act will be repealed by the Coastal Zone Management Bill when it is enacted. The Coastal Zone Management Bill is designed, to implement, among other matters, the provisions of the 1996 Protocol to the London Convention.

Marine Pollution (Control and Civil Liability) Act, No. 6 of 1981

This Act (previously called the "Prevention and Combating of Pollution of the Sea by Oil Act) implements the International Convention on Civil Liability for Oil Pollution Damage of 1969 (See Chapter 3). The Act is intended to prevent the pollution of the marine environment from pollution by oil and other harmful substances and to determine liability where loss or damage is caused by the discharge of oil from ships, tankers and offshore installations.

The Act makes it an offence to discharge oil from any ship, tanker or offshore installation unless it can be proved that, (1) the oil was discharged to secure the safety of, or prevent damage to a vessel, or to save a life, or (2) oil escaped from the vessel as a consequence of damage and that all reasonable steps were taken to prevent, stop or reduce oil escaping; or (3) the oil leaked out in circumstances where this was not due to a failure to take reasonable care and all reasonable steps to prevent it continuing as soon as practicable after the leak was discovered.²³ The Act prescribes the requirement to report any oil discharge or the likelihood of oil discharge by the master of the vessel by means of the quickest communication available. The Act stipulates that it is the duty of the relevant designated Authority (1) to take measures to prevent pollution of the sea where oil is being discharged or is likely to be discharged²⁴, (2) to guard against and prevent pollution of the sea by oil²⁵ and (3) where the sea has been polluted by oil from vessels, to remove such pollution from the sea.²⁶

The Act provides that the owner of any ship, tanker or offshore installation at the time that oil is discharged, shall be liable for the costs of any measures taken by the authorities as well as for any damage caused by the discharge of the oil or by the measures taken in response.²⁷ It also requires tankers carrying more than 2000 long tons of oil to carry on board a valid certificate confirming that it has insurance to cover liabilities under the Act. It also provides that a ship may be detained if the owner fails to pay costs due under the Act or fails to provide the requisite financial guarantees.

The Act prohibits the transfer of oil and other prescribed harmful substances between vessels and/or offshore installations within harbours and other prohibited areas, without permission²⁸, and prohibits the operation of an offshore installation without a valid pollution safety certificate²⁹. It also deals with a variety of ancillary matters such as the inspection of vessels.

²³ Marine Pollution (Control and Civil Liability) Act, section 2.

²⁴ The designated authority is currently SAMSA, section 5.6.

²⁵ The designated authority is currently SAMSA, see section 5.6.

²⁶ The designated authority is currently the Department of Environmental Affairs and Tourism, Branch: Marine and Coastal Management, see section 5.6.

²⁷ Marine Pollution (Control and Civil Liability) Act, section 9. The liability of other parties such as agent, employees and salvors, is limited under section 10.

²⁸ Marine Pollution (Control and Civil Liability) Act, section 21.

²⁹ Marine Pollution (Control and Civil Liability) Act, section 24.

Regulations relating to the Prevention and Combating of Pollution of the Sea by Oil were made under the Act in 1984 and have been amended several times since.

Marine Pollution (Prevention of Pollution from Ships) Act, No. 2 of 1986

This Act implements the Convention for the Prevention of Pollution from Ships, 1973 as amended in 1978 (MARPOL 73/78). The Act adopts MARPOL 73/78 including Annexes I and II and makes the provisions of MARPOL 73/78 applicable to any South African ship wherever it may be, and to any other ship within South Africa's territorial waters or EEZ³⁰. It also empowers the Minister of Transport to make regulations to implement MARPOL 73/78. Various regulations have been made, including regulations to give effect to Annex V which deals with garbage generated on board ships.

The Regulations for the Harbours of the Republic of South Africa and South West Africa (The Harbour Regulations) (1982)

Regulations regarding conduct within harbours in South Africa were made under the South African Transport Services Act 65 of 1981 on 26 March 1982. Section 73(1) gives the Minister power to make these regulations³¹. These prohibit the throwing of articles into a harbour if it will cause a danger, obstruction or nuisance³²; and the deposition of foreign matter, including oil, or water containing oil, into a harbour. It also requires ships' masters to prevent the falling into the harbour of loose objects³³ and requires the recovery of such objects where they will cause a danger or nuisance³⁴.

Gas Act, No. 48 of 2001

This Act seeks to promote the orderly development of the piped gas industry, but is not yet in force. The Act provides for the establishment of a National Gas Regulator to oversee and enforce the regulatory framework established by the Act; establishes a licensing regime for certain activities; and provides for ancillary matters such as inspections and the gathering of the information necessary to enable the Gas Regulator to perform its functions. Unless exempted by virtue of being an activity listed in Schedule 1 (which deals with small-scale activities) a licence is required:

- to construct gas transmission, storage, distribution, liquefaction and re-gasification facilities or convert infrastructure into such facilities;
- to operate such facilities; and
- to trade in gas.³⁵

An application for a licence, must, among other matters, include the plans and ability of the applicant to comply with applicable labour, health, safety, security and environmental legislation³⁶. The Act does not contain any further reference to environmental protection.

³⁰ Marine Pollution (Prevention of Pollution from Ships) Act, section 2.

³¹ In Government Notice GNR 562 in Government Gazette 8124 on 26 March 1982, as amended.

³² Regulation 38.

³³ Regulation 36

³⁴ Regulation 37.

³⁵ Gas Act, section 15 as read with Schedule 1.

³⁶ Gas Act, section 16(2)(f).

Mineral and Petroleum Resources Development Act, No. 28 of 2002

The Mineral and Petroleum Resources Development Act (MPRDA) which repeals the Minerals Act of 1991, entered into force on 1 May 2004. The MPRDA makes provision for equitable access to and sustainable development of the nation's mineral and petroleum resources. The Act affirms the State's obligation to protect the environment for the benefit of present and future generations, to ensure ecologically sustainable development of mineral and petroleum resources and to promote economic and social development. It establishes two similar but separate regimes, one for the mining of minerals (which involves the phases of reconnaissance, prospecting, mining and closure) and the other for petroleum exploitation (which involves the phases of reconnaissance, exploration, production and closure).

Chapter 4 of the Act deals with Environmental Management and refers specifically to the principles as set out in section 2 of the National Environmental Management Act. The holders of any rights related to mining or petroleum exploitation must abide by the general objectives of integrated environmental management as stipulated in Chapter 5 of NEMA and must manage all operations in accordance with an approved environmental management plan or programme (EMP). No operations can commence until the EMP has been approved by the authorities. EIAs are required in many instances before such a right is granted.

The Act also stipulates that the holder of such a right or permit is responsible for any environmental damage, pollution or ecological degradation resulting within or outside the boundaries from the mining activity.

In terms of this Act for petroleum activities an EIA and an EMPR has to be submitted to the Petroleum Agency South Africa as the designated agency on behalf of DME for approval. This Act also requires the compilation and submission of a Social Economic Development plan for the proposed project.

Mineral and Petroleum Resources Development Act, 2002: Mineral and Petroleum Resources Development Regulations, 2004

The Mineral and Petroleum Resources Development Regulations ("the MPRD Regulations") were promulgated under the Mineral and Petroleum Resources Development Act, on 23 April 2004.³⁷ The MPRD Regulations set out the forms and other detailed provisions necessary to implement the MPRD Act. In particular, they specify the procedures to be followed in applying for permits, the contents of social and labour plans, and the environmental responsibilities of those involved in mineral development or petroleum exploration and production. The MPRD Regulations stipulate, among other matters: the content of environmental impact assessment and scoping reports, environmental management programmes and management plans, and how these programmes and plans must be monitored and assessed; the different options for making the financial provisions for rehabilitation, management and remediation of negative environmental impacts that are required by section 41 of the Act; the procedures for closing mines and obtaining closure certificates, and obligations in relation to pollution control, waste management and other environmental impacts (these include obligations relating to the prevention, management and control of fires, noise,

³⁷ These were published as R. 527 in Government Gazette No 26275 of 23 April, 2004.

blasting, vibration and shock; water and air pollution, the disposal of waste materials, soil pollution and erosion; and stockpiles and deposits of mining residues).

In essence, every person engaged in prospecting or mining for minerals, or in petroleum exploration or production, must undertake EIAs at almost every stage of the process and then conduct their operations in accordance with an approved environmental management plan or programme that addresses the impacts referred to above.

Disaster Management Act, No. 57 of 2002

The Disaster Management Act (which was brought into force partially on 1 April 2004 and partially on 1 July 2004) establishes a legal and institutional framework to prevent and reduce the risk of disasters, to mitigate their severity, and to respond to them rapidly and effectively. An oil spill or other such event that threatens the environment could in certain circumstances, be classified as a disaster and is required to be managed according to the procedures outlined in this Act.³⁸

The Act provides for the establishment of an Intergovernmental Committee on Disaster Management, a National Disaster Management Advisory Forum, and Provincial and Municipal Disaster Management Centres and advisory forums. It requires the relevant Minister to publish a coherent, transparent and inclusive policy on disaster management in South Africa (“the national disaster management framework) and for each province to establish and implement a provincial disaster management framework.

Petroleum Pipelines Act, No. 60 of 2003

This Act (which is not yet in force) is intended to establish a national regulatory framework for petroleum pipelines, to establish a Petroleum Pipelines Regulatory Authority to oversee and enforce that framework; and to provide for ancillary matters. A licence issued by the Authority is required to construct, or to use, a petroleum pipeline, a loading facility, or a storage facility³⁹. An application for a licence, must, among other matters, include the plans and ability of the applicant to comply with applicable labour, health, safety, security and environmental legislation,⁴⁰ and the Authority may impose licence conditions relating to health, safety and environmental standards.⁴¹ The Authority may also require a licensee to submit financial security or to make other arrangements acceptable to the Authority, to ensure compliance with any licence condition relating to health, safety, security of the environment.⁴²

When it comes into effect, the Act will apply to offshore oil and gas facilities because the term “petroleum” is defined to include crude oil; “loading facility”

³⁸ The Disaster Management Act defines “disaster” as “a progressive or sudden, widespread or localised, natural or human-caused occurrence which – (a) causes or threatens to cause – (i) death, injury or disease; (ii) damage to property, infrastructure or the environment, or (iii) disruption of the life of a community; and (b) is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources.” (section 1).

³⁹ Petroleum Pipelines Act, section 15.

⁴⁰ Petroleum Pipelines Act, section 16(2)(f).

⁴¹ Petroleum Pipelines Act, section 20(1)(w).

⁴² Petroleum Pipelines Act, section 27.

refers to marine facilities for loading or off-loading petroleum (excluding bunker facilities) and “storage facility” is defined to include bulk storage facilities for crude oil (other than those on premises where petroleum products are manufactured)⁴³.

Guidelines for the preparation of Environmental Management Programme Reports for prospecting for and exploitation of oil and gas in the marine environment (DME, 1996)

These Guidelines were compiled by the Department of Minerals and Energy (“DME”) to assist applicants for, and holders of, permits for exploring for, or exploiting, offshore oil and gas to draw up environmental management programmes (EMPs). The Guidelines were prepared prior to the coming into effect of the Mineral and Petroleum Resources Development Act and Regulations and accordingly should be used with caution.

Guidelines for the preparation of an Environmental Management Programme Report (EMPR) for prospecting for and mining of offshore precious stones (DME, 1997)

These Guidelines were compiled by the DME to assist applicants for, and holders of, permits for prospecting for, or mining, offshore diamonds and other precious stones, to draw up EMPs. The Guidelines were prepared prior to the coming into effect of the Mineral and Petroleum Resources Development Act and Regulations and accordingly should be used with caution.

Generic Environmental Management Programme for Oil and Gas Exploration in the South Africa offshore

These Guidelines were compiled by the oil industry.

Other

Sea-shore Act, No. 21 of 1935

Although the Sea-shore Act is dated, it remains fundamental to any existing or proposed institutional arrangements for the coast. Ownership of the sea and sea-shore is vested in the President for use and benefit of the public. The Act allows for specific uses of the area but does not provide for any form of access rights to the seashore from above the high water mark. The administrative functions of the Act have been largely assigned to the coastal provinces. In order to align with the Constitution, the Sea-Shore Act needs to be updated to be consistent with other recent environmental and planning legislation, and to fill existing gaps in the legislation (White Paper for Sustainable Coastal Development 2000).

National Water Act, No. 36 of 1998

This Act identifies sustainability and equity as central guiding principles in the protection, use, development, conservation, management and control of water resources. Although the definition of the term “water resource” does not explicitly exclude the sea, it is clear from the examples given in the Act of what constitutes a water resource, as well as from a reading of the Act as a

⁴³ Petroleum Pipelines Act, section 1.

whole, that the term is not intended to include the sea, although it does include estuaries.

The Act provides a series of measures intended to ensure the comprehensive protection of all water resources. Within this context, measures are defined to prevent the pollution of water resources and to remedy the effect of pollution of water resources. This Act is founded on the principle that national government has overall responsibility for and authority over water resource management and it lays the basis for regulating water use detailing the various types of licensed and unlicensed entitlements to use water. These include control measures for discharge of waste-water (and its contents) into any water resource.

The Act provides regulations and conditions for the issuing of general authorisations and licenses to be granted for use of water resources. Water use, as defined in the Act, includes the discharging of waste-water into a water resource and disposing of waste in a manner that may detrimentally impact on a water resource. A licence is required to discharge waste, or water containing waste, into a water resource unless that use is below a stipulated threshold which falls within a general authorisation. Licences may be granted by the responsible authority, which may specify the permissible levels of chemical and physical components permitted to be discharged, the treatment to which the waste-water must be subjected, and the volume of waste water allowed to be discharged. The Act makes provision for the authorities to prescribe management practices to prevent the pollution of any water resource by waste disposal. Although DWAF currently requires persons discharging effluent into the sea to obtain a permit, their legal authority to do so, or to use any of the provisions discussed above to prevent marine pollution, is doubtful due to the fact that the sea appears to fall outside the definition of "water resource".

Marine Living Resources Act, No. 18 of 1998

The Marine Living Resources Act (MLRA) repealed most of the old Sea Fishery Act, No. 12 of 1988. The Act and the regulations published under it aim to provide for the conservation of South Africa's marine ecosystems and the sustainable utilisation of marine living resources.⁴⁴ It affords protection to every species of sea animal (vertebrate and invertebrate), including the spawn or larvae of such sea animal, but excluding any seal or sea bird. Fish and marine organisms are protected by means of prohibition against their catching, disturbance or possession although the Act makes provision for the granting of commercial, recreational and subsistence fishing rights. The Act emphasises fair and equitable access to resources, the gradual transformation of fishing methods, the development of fees for utilisation and a favourable business environment in fisheries. The Act provides for a principle of national control and co-ordination and places responsibility for resource-allocation decisions with the Minister of Environmental Affairs and Tourism.

⁴⁴ The preamble of the MLRA states that the purpose of the Act is: "*To provide for the conservation of the marine ecosystem, the long-term sustainable utilisation of marine living resources and the orderly access to exploitation, utilisation and protection of certain marine living resources; and for these purposes to provide for the exercise of control over marine living resources in a fair and equitable manner to the benefit of all the citizens of South Africa; and to provide for matters connected herewith.*"

The MLRA empowers the Minister responsible for the environment to declare an area to be a marine protected area⁴⁵ for a variety of conservation reasons or “to diminish any conflict that may arise from competing uses in that area”.⁴⁶ No person may, within a marine protected area: dredge, extract sand or gravel, discharge or deposit waste or any other polluting matter, or in any way disturb, alter or destroy the natural environment, construct or erect any building or other structure, or carry on any activity which may adversely impact on the ecosystems of that area, unless they have obtained the permission of the Minister. However the Minister may only permit such an activity if it is required for the proper management of the marine protected area.⁴⁷

The Minister and any organ of state exercising any power under the MLRA must have regard to certain objectives and principles, including the need to minimise marine pollution.⁴⁸ The MLRA also authorises the Minister to make regulations regarding the prevention of marine pollution.⁴⁹

South African Marine Safety Authority Act, No. 5 of 1998

The South African Maritime Safety Authority Act (SAMSA Act) provides for the establishment of the South African Maritime Safety Authority (SAMSA) and identifies the objectives and duties to be carried out by this authority. The objectives of SAMSA, defined within the Act, are 1) to ensure safety of life and property at sea, 2) to prevent and combat pollution of the marine environment by ships and 3) to promote South Africa’s maritime interests.

The SAMSA Act identifies SAMSA as the authority responsible for administering and achieving the objectives set out in the Act as well as in the Merchant Shipping Act (1951), the Marine Traffic Act (1981), the three Marine Pollution Acts discussed above (1981, 1986 and 1987) and the Wreck and Salvage Act (1996). The SAMSA Act states that responsibility for certain matters relating to the combating of pollution is assigned to the Department of Environmental Affairs and Tourism.⁵⁰

The fragmentation of authority and duties to combat, prevent and control pollution of marine waters is considered to be problematic and requires revision in order to achieve this objective.

Draft Coastal Zone Management Bill

The DEAT has prepared a draft Coastal Zone Management Bill to implement the provisions of the White Paper on Sustainable Coastal Management in South Africa and the 1996 Protocol to the London Convention. The Bill seeks to establish a legal foundation for the implementation of integrated coastal zone management and when enacted, will fundamentally alter the approach to managing the coast, maritime zones and areas of land immediately adjacent to the seashore. The draft Bill has not yet been published for comment.

⁴⁵ MLRA section 43.

⁴⁶ MLRA section 43(1)

⁴⁷ MLRA section 43(3)

⁴⁸ MLRA section 2(g)

⁴⁹ MLRA section 77(2)(w).

⁵⁰ SAMSA Act section 51(2).

6.3 Institutions

This section contains a brief reflection on the various institutions which have responsibilities for the marine environment.

In terms of the Constitution of the Republic of South Africa, Act No. 108 of 1996, all laws and matters relating to mineral and energy matters are administered under the control of the Minister of Minerals and Energy in the National Government. The overall aim of the Department of Minerals and Energy is to ensure responsible exploration, development, processing, utilisation and management of minerals and energy resources.

Up to five organisations are responsible for management of various aspects of marine pollution within South Africa and are as follows:

1. DEAT, Branch: Marine and Coastal Management (MCM) – oil spill pollution combating i.e. once it has entered the environment
2. Department of Transport (DOT) which has inaugurated the South African Maritime Safety Authority (SAMSA) – oil pollution prevention
3. Department of Water Affairs and Forestry – responds to any oil spills in fresh water, issuing of permits for effluent disposal into freshwater systems as well as compliance monitoring. There are discussions currently underway between DEAT and Department of Water Affairs (DWAF) regarding the management of pipeline discharges from land into the ocean.
4. National Ports Authority – jurisdiction over any oil pollution occurring within the boundaries of harbours or ports within South Africa
5. Department of Minerals and Energy – addressing coastal and marine mining-related pollution issues by means of EMP enforcement

There is no lead implementing agency to provide a co-ordinating role for marine pollution management. Marine pollution management within South Africa is generally considered to be required in cases of emergency e.g. a shipping disaster resulting in an oil spill.

DOT delegated the national responsibilities of oil pollution combating (once the oil spill has occurred) to the DEAT MCM Branch to be managed in consultation with DOT, whilst the responsibilities of oil pollution prevention was delegated to SAMSA in 1998. In the event of an oil spill incident, the nearest competent authorities, such as municipalities, port and harbour authorities and wildlife organisations (i.e. the authority that has jurisdiction over that particular stretch of coastline; harbour etc.) are responsible for implementing, managing and monitoring clean-up operations of the shoreline. Marine and Coastal Management coordinates the activities of these local authorities in the event of a clean-up operation being required.

Department of Minerals and Energy (DME)

DME is charged with the implementation, monitoring and enforcement of environmental management for mining activities and minimising negative impacts on the marine environment. It is also required to evaluate and make recommendations regarding EIAs and EMPs

The Directorate: Mineral Development addresses environmental issues of mining and drilling activities through the Sub-Directorate: Mine Environmental

Management. The responsibility of this government department is to implement, monitor and enforce management protocol for such mining activity to minimize negative impacts, including those on the marine environment. It is also the responsibility of this Sub-Directorate to evaluate and make recommendations to the Director regarding all EMPs and EIAs submitted to the department, including those pertaining to marine environmental matters. Although this sector of the government is the official governing body for all mining impacts within South Africa, two branches of DEAT (Environmental Planning and Coordination and MCM) contribute significantly to such management protocol implemented. In evaluating mining related EMPs and EIAs, the DME makes use of extensive consultation and evaluation by several other government departments, namely; Department of Agriculture, Department of Water Affairs and Forestry, Department of Environmental Affairs and Tourism (specifically Marine and Coastal Management) and local municipalities.

The *Mineral and Petroleum Resources Development Act* reflects that the petroleum section of mining will be allocated to the Petroleum Agency of South Africa (PASA).

Department of Environmental Affairs and Tourism (DEAT)

DEAT is responsible for the promotion of environmental protection, conservation and planning. It is also obliged to facilitate tourism development; authorise sustainable development (following review of EIAs); protect natural biodiversity; improve the quality and safety of the environment and set TAC limits under the MLRA.

Marine and Coastal Management (MCM)

The Marine and Coastal Management Branch of DEAT is responsible for controlling marine pollution. More specifically, responsibility for marine pollution management lies within the Chief Directorate: Resource Management, Directorate: Integrated Coastal Management and Development, Sub-Directorate: Marine and Coastal Pollution Management. The specific responsibilities of this Sub-Directorate with respect to oil pollution are defined as:

- co-ordination and implementation of coastal protection and clean-up measures during oil spill incidents
- control and management of “Kuswag” (Coast-watch) vessels and aircraft
- control of all dispersant spraying operations
- maintenance of dedicated oil spill equipment and dispersant stocks
- sensitivity mapping for oil spill response
- compilation of relevant oil spill contingency plans
- development of policies on oil spill response strategies (e.g. on dispersant use)

MCM, Sub-Directorate: Marine and Coastal Pollution Management have developed Coastal Oil Spill Contingency Plans for all coastal regions (21) of South Africa, which aim to achieve efficient response to oil spill incidents. The goal of these contingency plans is clearly to define the responsibilities of various stakeholders, the structures to be set up and the response required by such parties for the duration of the incident. The Department is currently in

the process of reviewing and updating these plans in consultation with local authorities, to bring them in line with new local government structures.

Department of Water Affairs and Forestry (DWAF)

DWAF is responsible for the management and regulation of freshwater resources in South Africa. Ultimately, DWAF is responsible for the quality of water within water catchments and its quality when it reaches the sea. Within this area of responsibility, DWAF is also responsible for issuing licences for discharge of effluent into freshwater systems and for compliance monitoring of permit conditions. It is important to note that DEAT currently manages the authorisation of marine outfalls and discharges through the EIA Regulations (made under the Environmental Conservation Act, discussed in more detail in section 5.2.3 of this report). There are, however, discussions currently underway between DEAT and DWAF regarding the management of pipeline discharges from land into the ocean. DWAF has developed and updated water quality guidelines for various receiving environments, including marine water quality guidelines and has expressed an intention to take over monitoring of effluent discharged into the marine environment.

One of the key legislative gaps in South Africa is the regulation of sea outfall disposal of effluent. This is currently not sufficiently covered within the new National Water Act (discussed in more detail in section 5.2.11 of this report) and there are, however, proposals to draft and promulgate a new Marine Pollution Act.

South African Maritime Safety Authority (SAMSA)

The South African Maritime Safety Authority (SAMSA) was formally inaugurated in April 1998 following which DOT delegated all national responsibility for marine pollution prevention to SAMSA. SAMSA serves as South Africa's independent statutory maritime safety authority and is accountable to the Minister of Transport. The agency is a partially self-funding, non-profit, commercialised organisation and carries out all the existing functions of the previous Chief Directorate: Shipping. SAMSA's mandate is to promote South Africa's maritime interests and exercise control over shipping to ensure safe and clean seas through the primary functions of the survey of ships, prevention of pollution of the sea and liase international and regional co-operation. Specific roles of SAMSA with respect to marine pollution prevention can be identified as being:

- control of shipping casualties
- supervision of oil transhipments
- prosecutions in the case of deliberate discharges of oil
- legal aspects pertaining to a shipping casualty or oil spill
- processing and payment of claims arising out of an oil spill
- compilation of relevant contingency plans

SAMSA plays a vital role in the development of marine training on the Southern African continent for the enhancement and establishment of good regional maritime standards and marine administrations. The relevant legislation (Marine Pollution: Control and Civil Liability Act 6 of 1981 is administered by SAMSA, but certain of the functions are delegated to DEAT, MCM.

Petroleum Agency of South Africa

The Petroleum Agency is the body to which the Minister of Minerals and Energy intends designating the functions outlined in Chapter 6 of the MPRD Act. These include the promotion of on-shore and off-shore exploration for and production of petroleum; the consideration of applications for permits to explore for and to produce petroleum products; to monitor compliance with those permits and to report to the Minister regarding that issue and to review and make recommendations to the Minister regarding the approval of environmental management plans and environmental management programmes.

7. ASSESSMENT OF KEY SIMILARITIES AND DIFFERENCES, AND GAP ANALYSIS

7.1 Introduction

As discussed in Chapter 2.1, key similarities and differences, as well as gaps have been identified by comparing the policies and legislation in the three countries with each other, and by examining in relation to a list of key potential impacts from marine mining, dredging and offshore exploration and production activities, as well as existing international agreements.

Furthermore reference has been made to international guidelines, e.g. World Bank, UNDP and other international organisations.

In addition, a further examination was made based on answers to the following questions:

1. Is the protection of the marine environment covered by legislation in each of the three countries?
 - a. Relevant laws and regulations?
 - b. Relevant content of these?
2. Have relevant international conventions been signed and ratified and enabled by legislation?
 - a. Relevant conventions?
 - b. Relevant legislation?
3. Is the national legislation valid in the Exclusive Economic Zone (EEZ) of the three countries, i.e. outside the territorial waters?
 - a. Relevant enabling legislation?
4. Is the protection of the marine environment covered by sectoral legislation for mining, petroleum and dredging activities?
 - a. Relevant legislation?
 - b. Relevant content of these?
 - c. Is legislation concerning dredging (and dumping of dredged material) in place?
5. Is the protection of the marine environment covered by sectoral environmental legislation or just by general environmental legislation?
 - a. Relevant legislation?
 - b. Relevant content of these?
6. Does sectoral and/or general or sectoral environmental legislation include:
 - a. Environmental Impact Assessments (EIA) requirements, and how specific?
 - b. Environmental Management Programmes (EMP) requirements, and how specific?
 - c. Monitoring and auditing, and how specific?
 - d. Sanctions for non-compliance?
 - e. Rehabilitation requirements?
7. Does sectoral and sectoral environmental legislation cover all phases of mining and petroleum activities, i.e. reconnaissance, prospecting

(mining), exploration (petroleum), development, production and rehabilitation?

8. Do conflicts exist between sectoral environmental legislation for mining, petroleum and dredging activities, general environmental legislation and environmental legislation for other marine sectors?
9. Is there an independent authority for administering environmental legislation in each of the three countries?
10. Are there guidelines for Environmental Impact Assessments, and Monitoring and Auditing?

7.2 Similarities and differences

In all three BCLME countries there is significant evidence in the Constitution, policies, long term plans and visions that the countries are concerned about the protection of the marine environment.

In all three BCLME countries the licensing of mining and petroleum activities is covered by legislation. Whilst the licensing regime for mining is rather similar in the three countries, there are significant differences in the regime for petroleum exploration and production. In Namibia and South Africa there is a concession/tax regime whereby the oil company is the licence-holder and owner of the produced petroleum. In Angola the national oil company is the licence holder and shares the petroleum production with the oil company which operates the licence on behalf of the national oil company.

Although in South Africa the general environmental legislation is further developed than in Angola and Namibia the sectoral legislation for the mining and petroleum activities takes precedent, i.e. in South Africa the general environmental legislation does not include mining and petroleum exploration and production as activities which require an EIA but leaves the obligation to the sectoral Minerals and Petroleum Resources Act.

In all three countries, EIAs are required before any significant activity in marine mining, dredging and offshore petroleum exploration and production are carried out. In addition in Namibia and South Africa EMPs are required through policy and legislation respectively.

In South Africa, the new Mineral and Petroleum Resources Development Act and associated Regulations which covers both the mining and petroleum sectors are very clear in its requirements for EIAs and EMPs. Where the environmental protection provisions in the sectoral petroleum legislation are weak, such as in Angola, separate sectoral environmental legislation is either in place or being developed. In Namibia the requirements for EIAs are spelled out in the Model Petroleum Agreement and the general Environmental Assessment Policy for Sustainable Development and Environmental Conservation.

The current Mining Act in Angola is weak in environmental protection, but there are presently no marine mining activities. In Namibia the new Minerals Bill is a major improvement in this respect over the current Minerals Act. The Bill requires the development of Regulations to be sufficiently effective.

In all three countries the Ministry responsible for promotion of mining and petroleum investment is also responsible for the adherence to the environmental provisions in the legislation, although in Namibia this responsibility will formally be transferred to the Ministry of Environment and Tourism once the new Environmental Management Bill has been introduced. However, the draft Bill also promotes the idea of collaboration between the Ministry of Environment and Tourism and other Ministries as appropriate. In South Africa, if the new EIA regulations (a first draft of which has been published for comment) come into force in their current form, certain mining activities will also be subject to EIAs enforced by provincial environmental authorities or the Department of Environmental Affairs and tourism.

In Namibia and South Africa, which are common law jurisdictions, the implementation of International conventions requires the development of enabling national legislation. In Angola, which is a civil law jurisdiction, the ratification of Conventions makes the provisions applicable automatically in the country. It is yet uncertain whether this is also valid for Conventions which are not yet in force because insufficient countries have signed and/or ratified them.

Angola is Party to most of the relevant international agreements as listed in Chapter 3, while Namibia and South Africa have not signed and/or ratified some important conventions such as OPRC. In particular in Namibia some conventions that have been signed and ratified have to be effectuated by the development of enabling legislation.

7.3 Gaps

Angola

Concerns are:

1. Existing sectoral mining legislation is weak regarding environmental protection;
2. There is a Decree on Petroleum Environment Protection but not for mining;
3. General and sectoral environmental legislation does not specifically require EMPs though in the petroleum legislation the elaboration of a plan containing mitigation measures is required;
4. There is no requirement and/or allowance to set aside funds for rehabilitation and/or decommissioning in the mining and petroleum legislation though a closure plan must be submitted 1 year before closure;
5. There is no legislation allowing the proclamation of marine protected areas;
6. Legislation does not stipulate minimum standards for operations;
7. New EIA Decree provides inadequate timeframes for public consultation, analysis of the EIAs and EIA process.

Namibia

Namibia's Environmental Assessment Policy is very progressive and provides a useful framework for environmental management, but associated legislation for the control of environmental impacts is inadequate.

Development of the Environmental Management Bill began in 1996 but has not been submitted yet to Parliament. A new Pollution and Waste Management Bill has also been developed and should replace some rather fragmented legislation currently in use.

A new Water Bill is in preparation but its present draft contains only minimal reference to the marine environment.

Concerns are:

1. There is no framework legislation requiring EIAs;
2. Legislation does not stipulate requirements for flaring of petroleum or discharges of water into the sea;
3. There is no requirement for a rehabilitation fund for mining. However this is contained in the new draft Bill. Such requirement is in place for the petroleum sector;
4. Various appropriate international agreements must be signed and ratified and national legislation must be developed to give effect to these agreements to which Namibia is already a Party;
5. The draft Minerals Bill contains penalties for non-compliance with respect to environmental protection, but not the Petroleum legislation.

South Africa

Concerns are:

1. Inconsistent requirements for mining and petroleum activities even though the impacts are in many cases the same;
2. There is no coastal management system so strategic decisions are not integrated enough. This could improve under new legislation which is presently in draft;
3. Some conventions still need to be signed and ratified (e.g. oil spills and Abidjan);
4. In terms of the present environmental legislation dredging activities will only require an EIA if it is for deepening and upgrading a harbour or making a marina (same for dumping of dredged material);
5. Laws do not stipulate minimum requirements for mining and petroleum operations, though standards might be included in permits.

8. CONSULTATIVE MEETINGS

8.1 Introduction

In accordance with the terms of Reference, Consultative meetings were held in Angola (Luanda), Namibia (Windhoek) and South Africa (Cape Town). For these meetings, senior government officials and other stakeholders were invited. An attempt was made to have all Ministries, other Authorities, Industry and Research institutes and civil society organizations with involvement in the protection of the marine environment represented. For logistical reasons it was decided that in South Africa mainly Cape Town-based representatives of those stakeholders would be invited. Letters of invitation were sent to all of them, for the Cape Town and Windhoek meetings by e-mail with follow-ups by telephone, in Luanda the letters were hand delivered as the e-mail service is not always reliable and again followed up by telephone. Although a number of regrets were received most targeted stakeholders were represented.

The meetings in Cape Town and Windhoek had the format of a round table discussion whilst the meeting in Luanda was characterised by statements from participants with little discussion involving the other participants. Whilst the meetings in Cape Town and Windhoek were conducted in English, in Luanda part of the presentation and the whole discussion were conducted in Portuguese which contributed very much to the quality of the contributions.

The minutes were subsequently circulated among the participants, and also to those invitees who did not attend, with a further request for comments on the draft paper and its recommendations. Few comments on the minutes or the draft paper were received besides those expressed at the meetings.

8.2 Meeting objectives

The primary objective of the Consultative meetings in accordance with the Terms of Reference of the project was to present the results of the project and to discuss the recommendations for harmonisation. In addition feed-back was invited concerning the factual correctness of the content of the Draft Discussion paper.

At the meetings the subjects for the discussion following the presentations were stated as:

- Content of paper for omissions
- Assessment: similarities and differences, and gaps
- Recommendations
- Way forward

While comments, corrections and additions to the Draft Discussion Paper would be gratefully received, it was emphasised at the meetings that comments and/or endorsement of the provisional recommendations as presented in the Draft Discussion paper would be even more important:

At all three meetings, the Project team presented the results of its work, concluding that “full harmonisation of the legislation for environmental

protection between the three BCLME countries is impractical because of their different legal systems, and unnecessary because of the wealth of legislation already in place. Whilst different standards are evident when comparing environmental policies and legislation in the three countries, all either have, or are in the process of, putting safeguards in place to ensure the minimization of unwanted impacts from marine mining, dredging and offshore petroleum exploration and production activities.

The efforts should rather be directed at in-country harmonisation of the individual sectoral legislation and between the general and sectoral legislation for environmental protection. In all three countries, there are jurisdictional overlaps that are cause for concern. Overlaps are not a problem if they achieve multi-sectoral reinforcement of the same principle or standard. However, if they result in conflicting processes and/or standards, then both authorities and the private sector will be confused as to the required targets and outcomes. In any policy and legal environment, clarity and consistency must be achieved. Concomitantly with the jurisdictional overlaps, there is institutional duplication in all three countries. As noted earlier, this duplication is beneficial if the same message is being reinforced by different organizations, but it is not helpful when officials from different (sometimes competing) Ministries are issuing contradictory instructions and information. The case is strong for policy, legislative and institutional consolidation in all three countries.

In all three BCLME countries enforcement of the current legislation is hindered by a shortage of trained personnel and lack of capacity in general. This is exacerbated by the fact that technical expertise and competence is spread thinly across too many institutions. It might be better to consolidate and, in so doing, achieve some sort of cohesion.

Although the EIA systems are largely similar in each of the three countries, the key recommendations (in addition to the above) are:

Emission and discharge standards and permit systems still need to be developed;

Requirements and/or allowances for setting aside funds for rehabilitation and/or decommissioning need to be specified and established;

Each country must ensure that their EIA systems stipulate special attention to transboundary impacts, both direct and indirect;

Namibia must pass its Environmental Management Bill and Pollution Control and Waste Management Bill;

All three countries must sign the relevant conventions and SADC protocols, and implement these;

All three countries have conflicts of interest since they are proponents, regulators inspectors and judges. There is a need for independent guiding, reviewing and post-implementation monitoring of EIAs.”

8.3 Meeting arrangements

The lists of invitees were drafted by the country representatives in the project team, based on their local knowledge of potential stakeholders and their representatives (Annex 6).

Each of the invitees received a formal invitation letter (Annex 2) with the Draft Discussion paper (Annex 3) approximately 2 weeks in advance of the meeting. For the Cape Town meeting the invitation letter was only distributed 1 week in advance but the individual invitees had already been contacted telephonically several weeks before. The distribution for the Cape Town and Windhoek meetings was done entirely by e-mail. For the Luanda meeting, because of the less reliable e-mail communication in Angola, the letters and draft were delivered by hand. This meeting was postponed from its originally planned date of 23 September to allow protocol issues on the invitation to be concluded. After the distribution of the letters attempts were made to approach those invitees who had not responded 2 – 3 days before the meeting.

At all three meetings the same presentation was given (Annex 4a, b), be it that the presentation on policies and legislation for the particular country was preceded by a summary of the policies and legislation in the two other countries. Parts of the presentation for the Luanda meeting were translated into Portuguese (Annex 4b).

After the meetings draft minutes were distributed for comments to all participants and original invitees. At least two weeks were given for comments. The final minutes included in this report (Chapter 4) have all received comments incorporated.

In all three countries hospitality for the meetings was provided by Government Ministries; in Cape Town: the Department of Environment and Tourism, Marine and Coastal Management; in Windhoek: the Ministry of Mines and Energy, Geological Survey; and in Luanda: the Ministry of Petroleum.

The invitation letter contained a request for comments. At the meetings participants were invited to send additional comments and with the circulation of the draft minutes participants and original invitees were reminded of the request for comments.

8.4 Conclusions

The minutes of the three meetings are contained in Annex 6. There was in general appreciation expressed for the work done by the project team and the report was considered a significant resource document.

There was little dispute on the main recommendation that there is no need to harmonise the policies and legislation in the three countries suggesting in general support. There was support for some kind of harmonisation in the form of standards possibly to be achieved through harmonisation of guidelines. The establishment of the Interim Benguela Commission could be important in this respect providing a “clearing house” for the exchange of documentation.

Most contributions consisted of support for the conclusions, recommendations and suggestions for expansion and some minor amendments. There was a discussion at the Windhoek meeting whether Conventions to which Namibia is party would have power of law in the country. It became clear that there are widely varying opinions on the subject which may well only be resolved after the issue is tested in Court. In Luanda the recommendation of implementing trust funds for rehabilitation drew critical comments.

The only disagreement was expressed at the Luanda meeting where there was strong opposition to the recommendation to establish rehabilitation and/or decommissioning funds for mine closure and petroleum installation decommissioning. It was expressed that the present system whereby the closure plans had to be submitted and approved one year before closure was adequate and had not resulted in any wrongdoing. One reason for this opposition may well be that in contrast with Namibia and South Africa where the operator pays tax, in Angola any tax would be paid by the national oil company SONANGOL which is the licence holder from the production share rather than the operator/contractor. The recommendation was amended to reflect the difference in situation between the three countries.

At the Luanda meeting there was also a strong plea expressed to make a Portuguese translation of the final report available.

There was wide interest at all three meetings in the way forward suggesting the importance attached to harmonisation of objectives and standards for marine protection, and better communication on this subject between the three BCLME countries.

The paper was reviewed by the project team members on the basis of the discussions and updated for the suggestions. The recommendations remained basically unchanged with the exception of the recommendation for the implementation of trust funds which has been amended as to refer to the objective of ensuring rehabilitation rather than the specific recommendation how to achieve it.

9. RECOMMENDATIONS AND GUIDELINES

Full harmonisation of the legislation for environmental protection between the three BCLME countries is impractical because of their different legal systems, and unnecessary because of the wealth of legislation already in place. Whilst different standards are evident when comparing environmental policies and legislation in the three countries, all either have, or are in the process of, putting safeguards in place to ensure the minimization of unwanted impacts from marine mining, dredging and offshore petroleum exploration and production activities.

Harmonisation of standards between the three BCLME would however be useful. This may be achieved through harmonisation of guidelines. The Interim Benguela Commission could be provide a “clearing house” for the exchange of documentation.

The efforts should rather be directed at in-country harmonisation of the individual sectoral legislation and between the general and sectoral legislation for environmental protection. In all three countries, there are jurisdictional overlaps that are cause for concern. Overlaps are not a problem if they achieve multi-sectoral reinforcement of the same principle or standard. However, if they result in conflicting processes and/or standards, then both authorities and the private sector will be confused as to the required targets and outcomes. In any policy and legal environment, clarity and consistency must be achieved. Concomitantly with the jurisdictional overlaps, there is institutional duplication in all three countries. As noted earlier, this duplication is beneficial if the same message is being reinforced by different organizations, but it is not helpful when officials from different (sometimes competing) Ministries are issuing contradictory instructions and information. The case is strong for policy, legislative and institutional consolidation in all three countries.

In all three BCLME countries enforcement of the current legislation is hindered by a shortage of trained personnel and lack of capacity in general. This is exacerbated by the fact that technical expertise and competence is spread thinly across too many institutions. It might be better to consolidate and, in so doing, achieve some sort of cohesion.

Although the EIA systems are largely similar in each of the three countries, the key recommendations (in addition to the above) are:

1. Emission and discharge standards and permit systems still need to be developed;
2. Requirements and/or allowance for setting aside funds for rehabilitation and/or decommissioning need to be specified and established;
3. Each country must ensure that their EIA systems stipulate special attention to transboundary impacts, both direct and indirect;
4. Namibia must pass its Environmental Management Bill and Pollution Control and Waste Management Bill;
5. All three countries must sign the relevant conventions and SADC protocols, and implement these;

6. All three countries have conflicts of interest since they are proponents, regulators inspectors and judges. There is a need for independent guiding, reviewing and post-implementation monitoring of EIAs.

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