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**Services relating to the Assistance for the Implementation
of the Minerals (Prospecting and Mining) Act**

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Contract No. 96/200/JP
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NAMIBIA

FINAL REPORT

Prepared for the Ministry of Mines and Energy of the Republic of Namibia
by the United Nations Industrial Development Organisation

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ABSTRACT

Project title: Services relating to the Assistance for the Implementation of the Minerals (Prospecting and Mining) Act

Project number: UNIDO - SI/NAM/94/801, Contract No. 96/280/JP

Country: Namibia

The objective of the project was to provide assistance and back-up services for the UNIDO mineral law advisor to the Ministry of Mines and Energy of the Republic of Namibia and to provide second opinions on the proposed draft amendment bill and draft regulations according to the experience gained by the Austrian Ministry of Economic Affairs in advising especially reform countries in Eastern Europe on similar issues.

These assistance services were rendered in the period December 1996 to July 1997. After analysis of the draft Minerals Act Amendment Bill and the draft Regulations to the Minerals Act, from the legalistic point of view some points are mentioned for consideration as described in the Conclusions and Recommendations, while from the practical point of view, the proposed legislation meets all the intended requirements.

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INTRODUCTION

The Ministry of Economic Affairs, Department of Mines (Oberste Bergbehörde), was requested within the frame of the project SI/NAM/94/801 to assist in the preparation of an

- amendment bill to the Minerals (Prospecting and Mining) Act, 1992 of Namibia and of the
- proposal for the regulations to implement the Act.

Contract 96/280/JP was concluded between UNIDO and the Ministry of Economic Affairs, Federal Department of Mines, on Dec. 18, 1996 and Jan. 7, 1997. The activities started with a first interim evaluation in Dec. 1996 – Jan. 1997 and continued as support activities throughout the remaining term of the UNIDO mineral law advisor until end June 1997, followed by a subsequent final evaluation of the draft Amendment Bill and the draft Regulation to the Minerals Act. In conclusion, it can be stated, that the objectives of the project were achieved in full.

The First Interim Report of Jan. 1997 provided a short evaluation of the Minerals Act (in the following also referred to as „the Act“). In conclusion, it was stated, that this Act has created an attractive environment to assure also in future the access for foreign investors to mineral resources in consideration of the principles of a modern policy for mining and mineral resources, of the related macroeconomic aspects, and of the safeguard of the interests and empowerment of Namibian citizens (small-scale mining). In view of an integral approach - in general the entire mining sector as economic entity should be covered by one set of laws and regulations and administrated by one authority, familiar with the sector - the existing Minerals Act shows certain regulatory requirements. It was stated, that especially the following aspects are not covered in sufficient detail by the Act in its present version:

- Realisation of mining activities
- Mining activities and documentation as mine plans (covered in the draft mine health and safety regulations)
- Measures related to abandoned mine dumps with economic potential

- Measures related to the erection and construction of plant and machinery for prospecting, mining, beneficiation, and smelting and refining
- Measures related to the nomination of responsible persons for the implementation of all mining activities (except under the draft mine health and safety regulations)
- Measures related to education and training in the field of mining
- Measures related to the protection of the surface during mining and the securing of the utilisation of the surface after the cessation of mining
- Measures in connection with the closing-down of mining activities
- Enabling provisions for the Minister of Mines and Energy to promulgate regulations for the above aspects.

In conformity with these recommendations contained in the First Interim Report, the UNIDO Mineral Law Advisor prepared a draft Amendment Bill for the Minerals Act and draft Regulations to the Minerals Act.

I. GENERAL COMMENTS CONCERNING MINING POLICIES

The special importance of mineral resources is their overall importance for the economy, which is far beyond their direct contribution to production and the direct adding of value. Problems with the supply of mineral resources may have major repercussions on the entire economy due to multiplication effects. Every economic activity, the balance of payments, and even the political stability of a country depend on a continuous and competitive supply with mineral commodities.

The problems of the supply with mineral resources result mainly from the fixed localisation of mineral deposits, their non-renewability, and the unequal global distribution of mineral

producers and main consumers.

Doubtless, the supply with mineral commodities is primarily the responsibility of the private sector. Due to the specific risks, especially for prospecting and exploration, however, the state has to assume certain roles. Of special importance is the creation of a legislative frame to enable and secure the production, and to enhance the adding of value. These objectives are also reflected by the minerals policy of the Government of Namibia. The goals and objectives of a modern policy on mining and mineral resources are especially:

- Securing of an optimum and stable supply of mineral commodities and fossil fuels for the industry
- Optimisation of the recovery of minerals during mining and processing
- Optimising the domestic mine production considering the possibilities of a long-term supply of the domestic industry
- Economical and rational use of minerals and fossil fuels and manufacturing of durable goods
- Inventarisation of the mineral potential of the country
- Increased utilisation of existing flows of substances
- Creation of a legal environment to secure a long-term mining sector
- Harmonisation of mining projects in the frame of environmental protection and including the protection of persons and goods.

Mining does not refer in this context only to the desired operational target, but includes in the larger sense all aspects referring to the ways and means typical for the system. As a rule, mining activities in the conventional sense are to be considered as the activities related to the basic production of mineral commodities. This production process means the transformation of minerals from their natural deposits into marketable products.

In consequence, the mining industry has to prospect and explore for mineral deposits in the various geological formations, and to develop these deposits by substantial infrastructural investments, before production can commence. In general, and in the definitions of most modern mining laws, the minerals industry has to carry out three specific main activities:

1. Prospecting and exploration for mineral deposits
2. Extraction of the minerals, and
3. Beneficiation of the run-of-mine production to a marketable mineral product.

In this context, it is the objective of an integrated modern mining legislation, to cover and to regulate all activities, which are necessary for the carrying out of mining operations.

The special aspects of the mining sector, which are also reflected by the Minerals Act, 1992, of Namibia, is the fixed localisation of mineral deposits in the crust of the earth, and the need to follow the ore bodies continuously during the mining activity. In addition, mineral deposits occur only to a limited extent in the geological formations, and cannot be reproduced. Each deposit differs from the others, and occurs in different geometry and grades, depth, size and spatial orientation in extremely wide variations. The deposits differ not only regarding the ore minerals, but also regarding their physical, geotechnical and hydrological parameters. In a similar manner, the host rocks exhibit a wide range of variations. This applies also to lithostatic pressure, geothermics, water inflows, the occurrence of gases, the dangers of spontaneous combustion or ignition, etc. in addition, in one deposit, the conditions may vary to large extents. As result, mining technology, mining equipment, plant and auxiliary facilities etc. have to be adapted for a similar range of variations, and have to suit the particular and widely variable geological conditions. Mining equipment, plant, machinery, and processing flow-sheets are therefore not as uniform as in other industrial sectors. All this results in the special risk profile of the mining sector and the high importance of safety measures and precautions.

Mine sites have to be rehabilitated of course after the end of mining activities. However, it has to be emphasised that the objective of mining is the production of mineral resources for

the economy. It should be noted, that contrary to common belief, mining does not utilise the areas in question permanently but - if well managed - only on a temporary basis, and returns the rehabilitated areas for other land uses. According to global data, mining requires about 0.5 % to 1 % of the surface area of a country.

Openpit mining is essentially characterised by the need to strip overburden, frequently on a large scale, and to deposit this overburden, in order to obtain access to the ore bodies. Auxiliary underground workings for conveyors, dewatering, or ground control are usually of limited extent, if any. This results in the large dimensions of some openpit operations. During the entire openpit operations, measures are usually necessary to control the hydrogeological conditions, and the stability of the slopes. Together with the general safety measures, these measures are of particular relevance for environmental protection.

In underground mining, access to the ore bodies is not by stripping of overburden, but by underground workings, from which the ores are mined. While the usual economic activities take place on the surface with little impact on underground conditions, underground mining by definition has significant local impacts, and creates its own working environment underground. As result, underground mining is confronted with conditions and adverse forces, which can be predicted only to a limited extent. The ore bodies occur with a large variation of geological conditions, especially compressive strength, pressure, hydrology, etc. as described above. As result, underground mining is characterised by special risks, which are not encountered on economic activities on the surface of the earth, such as cave-ins, rock bursts, drill hole blow-outs, water and gas inrushes, explosions, mine fires, etc., requiring special health and safety measures. Part of these hazards is not limited to the employees working directly in this environment underground, but affect also the surface and therefore third parties.

The above facts explain the special provisions usually made in mining laws. The special risks and hazards, usually associated with mining, have also led to special institutions and authorities for the supervision of the mining sector. These principles are also contained in the Minerals Act of Namibia, and shall be enhanced further by the proposed Amendment Bill.

As far as the licensing systems is concerned, the Minerals Act of Namibia is clear and follows unequivocal principles, but contains no provisions concerning the rights related to mining

activities in a wider sense, and concerning activities aimed at the utilisation of the crust of the earth outside the production of mineral resources.

The need for amendments of the Minerals Act concerns especially the promulgation of regulations, to adapt the legal frame rapidly to changing conditions and requirements. Such regulations provide the following opportunities:

- Flexible catering for the special circumstances of individual cases
- More flexible incorporation of facts created by the technological progress
- Possibility to incorporate terms subject to interpretation, catering both for the interests of the mining industry and the authorities
- Issuing of guidelines for the use of the discretionary power provided by the Act for the supervising and regulatory authorities.

II. GENERAL CONSIDERATIONS CONCERNING REGULATIONS

The present draft Amendment Bill for the Minerals Act of Namibia contains in an expedient manner a variety of enabling provisions for a more flexible administration of the Act. Several provisions were transferred from the Act into regulations. This procedure, which follows the conclusions of the First Interim Report, is recommended, but requires some additions, for which the following principal considerations are of relevance.

A regulation is a general norm, promulgated by an executive organ (usually the line ministry concerned), addressed to an unlimited group of persons („Any person..“). The regulation is a source of administrative law, and simultaneously a product of the administration since it is always promulgated by administrative institutions. In this aspect, the regulation differs from an act, which is produced by the legislative institutions. Regulations are aimed at relieving the legislative and are an indispensable instrument of administrative law. The scope of the tasks requires already a division of labour between the legislative and the administrative

institutions. Further, regulations, which are easier amended than an Act, are better suited for requirements resulting from variations of economic or social conditions. Finally, regulations are more suited to adaptation according to local differences of various conditions.

In general, all administrative institutions can be empowered to issue regulations through enabling provisions contained in the relevant acts. These enabling provisions have to define the conditions and the content of the regulation concerned. The enabling provisions further serve frequently the purpose, to justify the obligation of an administrative institution to issue such regulations, or to specify certain terms and conditions under which a regulation has to be issued. If the legislative bodies promulgate such an enabling provision, the conditions for this promulgation and the content of the regulations have to be determined. In consequence, it can be concluded, that a legal norm without regulations to implement this norm would result in excessive discretionary powers for the administrative authorities. Any administrative institution can promulgate regulations only within the frame of its material authorisation.

From the above, it may be concluded that a regulation only defines the law in a more precise manner, and that the content of the regulation has to be defined sufficiently in the underlying enabling provision.

An administrative institution may thus issue regulations to implement an act only for those acts, which contain an enabling provision authorising the institution concerned to do so. Regulations may only define the stipulations in the relevant acts. A regulation can not contain norms, which contradict the stipulations of an act, and can not create new law in fields, for which laws have not yet been promulgated. A regulation may only regulate in detail the generally worded provisions of an act in the spirit of this act. A regulation may also not create not yet defined legal terms, or discretionary provisions, which are not contained in the underlying act in a general manner. In view of the fact, that acts have to contain stipulations with a determined content, it can be excluded, that administrative institutions can be empowered by the Act formally, i.e. without determination of the material content, to regulate certain matters. Such formal legal delegations are problematical, since the legislative bodies would transfer in principle their competency to an administrative institution.

The limits of such an adequate determination can not be delineated in practice for all cases with overall validity. However, it can be assumed that an Act is sufficiently determined in

content, if it contains all essential characteristics of the intended regulations. It should be possible especially, to check the legality of the content of the regulation. The decisive criterion for the issue, if an Act contains not only a formal delegation but also a sufficiently material legal determination of the regulations to be promulgated on the basis of this Act, is the possibility to verify the legality of the content of the regulation. Should this verification lead to the result that the discernible enabling provisions are in such a general manner, that a detailed statement, whether the regulations conforms to objectives as defined by the Act or not, is not possible, then such a regulation will not conform to the objectives of a legal norm, since it provides significant, and usually objectionable, discretionary powers for the administrative authority concerned.

In conclusion, it can be stated that legislative bodies may delegate their competence for certain legal aspects to other institutions of the state. Provisions for such a delegation have to be contained in the respective acts, and have to be defined concerning content, objective and extent. Regulations promulgated on the basis of such enabling provisions contain prohibitions and commandments similar to acts.

III. COMMENTS ON THE DRAFT MINERALS ACT AMENDMENT BILL AND THE DRAFT REGULATIONS TO THE MINERALS ACT

A. Draft Minerals Act Amendment Bill

a) It can be deducted from the previous statements on regulations, that some of the provisions for regulations in their present form in the draft Minerals Act Amendment Bill are to be considered as formal legal delegations but not as legally determined regulations. According to the draft amendments of the following sections of the Principal Act listed below, the Minister of Mines and Energy (in the following referred to as the Minister) prescribes the form and manner concerning the contents of certain applications or reports by regulation:

- Section 18(2)
- Section 21(2)
- Section 33(2)

- Section 45(1) lit. (a), (d) and (e)(i)
- Section 49(2)(b)
- Section 60
- Section 66(1) lit. (a) and (d)
- Section 68
- Section 76(1) lit. (a), (d) and (e)(i)
- Section 79
- Section 89(1) lit. (a) and (d)
- Section 91
- Section 101(1) lit. (a), (d) and (e)(i)

The amendment of section 89 should extend the enabling provision also over paragraph 89(1)(e) in order to avoid a discrepancy with section 16 of the draft regulations.

b) The draft amendments of section 28 of the Principal Act, concerning the manner of pegging of claims, and of section 123(4) of the Principal Act, concerning payments of parts of the nominal licence fees to landowners, define no frame within the Principal Act for the discretionary powers of the Minister. In contrast, the draft amendments of sections 53 (drilling of drill holes) and section 127(1) (export permits), contain a sufficiently defined frame for such regulations.

c) The insertion of section 138A in the draft amendment bill as general enabling provision for the Minister to promulgate regulations, could define in further detail the regulatory frame concerning commissioning of mining equipment, plant and workings, and environmental protection. The current environmental measures contained in this section refer only to protection and rehabilitation of the surface (lit. e). In view of the importance and sensitivity of environmental regulations and the recommendable 'one stop approach' of the Minerals Act, such regulations (which could be promulgated in theory under lit. g (other matters), should be included as separate item into the demonstrative list.

d) Finally, the consideration to include activities not related to the direct mining of

mineral resources, but to the use of the crust of the earth in general (amendment of section 2(2) of the Minerals Act) is highly recommended. In this context, it could be considered to define in the Amendment Bill, which parts of the Minerals Act are applicable for such activities.

B. Draft Regulations to the Minerals Act

a) Concerning the draft regulations, sections 5, 7, and 8 (concerning pegging of claims, and obligations of claim holders concerning record and returns) contain an enabling provision according to which the right of the Minister to issue regulations, is delegated to the Mining Commissioner. Such a delegation could be included into the relevant sections of the Amendment Bill.

IV. GENERAL CONSIDERATIONS CONCERNING ACTIVITIES RELATED TO MINING

The following general considerations are presented to assist in a wider scope the Amendment Bill for the Minerals Act of Namibia. They concern mineral laws, certain significant activities, and reasons to include such activities into a general legal norm for mining.

Those countries of the world with long and legal mining traditions, have developed legal systems which contains besides the mining laws other laws related to the use of the crust of the earth for activities, other than those related to the recovery of mineral resources. While the mining law in general regulates the ownership of mineral resources, and aims at a legal frame defining the conditions for granting rights for the exploitation of these resources and the activities related to the use of these resources, these other activities concern the use of mines for tourism purposes, use of old mines for storage purposes including waste disposal, the use of geothermal energy in countries with favourable conditions, etc.

A. General background

The industrial and economic development especially in the field of mineral resources and basic industries is experiencing at present turbulent changes, caused by a number of technical and economical advances concerning exploration and exploitation, the transport and uses of mineral resources and the resulting interdependencies, as well as the increasingly recognised need for environmental protection.

The mineral resources, which are concentrated in mineral deposits and are amenable to mining, belong to the most important natural resources. Mining differs from other manufacturing sectors by a number of special characteristics, of which the most obvious is the fixed localisation of mineral deposits. Contrary to general manufacturing, the location of a mine can not be selected freely, but is determined by the occurrence of the mineral deposit. The mining industry therefore has to operate more than any other manufacturing sector within pre-determined areas. A second major characteristic of the mining sector is the fact that quantity and quality of the material to be produced are predetermined, and can not be increased or improved.

The need for mineral resources is large, because the global requirements are large. Production and sales of mineral commodities and fossil fuels reflect the needs of society. The use of minerals is necessary for covering the requirements of society, and minerals are mined only to an extent matched by demand. Major authorities indicate - reference is made to the various World Bank papers dealing with these matters - that in the foreseeable future a further increase of mineral production is to be expected. Major factors are not only the increase of the population, but also the increase of the average standard of living. These increases will affect in particular the countries of the Third World. The people in the Third World wish to lead a better way of live and will have to live in a better way, than is presently the case, if a peaceful development is to be maintained. And a major factor to safeguard the present and future peaceful development is doubtless the optimum utilisation of the crust of the earth for the supply of mineral commodities and fossil fuels.

In view of the considerable ecological damages caused by the technical and economical

development of the last decades, it is without doubt understandable that a large number of people have grave concerns for the future of our planet. To a certain extent it can be understood that the widespread aversion against industry and technology, created in this context, affects the mining industry in particular. The recovery of mineral resources from the crust of the earth is associated with deep impacts on the local environment. It is therefore beyond doubt that mine sites have to be rehabilitated carefully after the termination of mining activities. Also during operations, responsible environmental management and monitoring is required to minimise possible adverse environmental impacts of the mining activity.

Also in those regions of the world, where industrial activity is governed mainly by economic aspects, it is a requirement to aim at an appropriate balance between economy and ecology, and to conduct the production of mineral and energy resources in an ecologically sound manner, to achieve the maximum acceptance to the benefit of the national economy.

The linkage between mining operations and environmental protection is not new. The obligation of a mine operator to conduct prospecting and mining with due regard to the protection of the environment, to achieve an equitable relationship with the owners of surface rights, to restore mine damages or pay for such damages, to safeguard the rehabilitation of surface areas after temporary use for mining, etc., are already contained in the earliest formal norms and regulations for the mining sector.

A modern legislative frame for the mineral law should aim within the national economic interests at raising the role of the domestic mineral resources and mineral industry. Legal measures should reflect the special characteristics of the minerals industry, such as the facts that mine sites are determined by the localisation of the mineral deposits, and that mineral deposits are depleted and non-renewable; they should consider the high investment requirements and risks, the integrated macroeconomic interests, the interests of all stakeholders (employers, employees, third parties) etc., and should apply in the setting of priorities in zoning and development planning with multiple use of certain defined areas.

In general, those activities related to the utilisation of the crust of the earth can be considered to fall within the scope of the mineral law, which are characterised by a similarity to the mining of minerals, i.e. using ways and means which are characteristic for mining. Frequently, such activities can not be differentiated from mining-related activities, and are connected in an

inseparable manner with such activities. This applies e.g. to the use of the underground workings of a mine for purposes other than mining, since usually only part of the mine workings is used for such purposes, with their repercussions for the remaining parts of the mine workings. Also, if closed mines are reopened, previous closing and safety measures could be affected in consequence.

The utilisation of the crust of the earth results in a confrontation with the elementary natural geological forces, and represents thus a system comprising man-nature-machinery, while the activities subsequent to mining are men-machinery systems. In consequence, mining is to be carried out with the objective of economic gain, but with utmost regard for the safety of man and environment. The causal chain combining the use of the geological formations containing the mineral wealth and the handling of machinery is thus expanded by an integral system combining the protection of safety, health and environment. Under those aspects, the points to be considered are not only the optimum technical and economical application of specific mining technologies and methods, but primarily considerations and processes concerning the control of nature and mining safety. This applies not only to occupational safety, but to safety measures for the protection of surface and environment, and to safety measures after the cessation of mining or of the other activities not related to mining but utilising the crust of the earth for other purposes.

For the above reasons, all the activities mentioned above are to be considered as part of the mining sector. The frame of mining legislation therefore has to include the measures to prevent hazards resulting for the labour force, the population in general, and the environment. It should be emphasised that the inspection and enforcement of the related measures requires competent and experienced personnel familiar with all key aspects of mining, both as responsible managers in the mines and as mining inspectors.

B. Geothermal energy

The proposed Minerals Act Amendment Bill considers in the amended section 2 to include the prospecting for and the use of geothermal energy into the stipulations of the Minerals Act.

The source of geothermal energy is - in general - the globally available natural heat of the crust of the earth. Geothermal energy, however, is of economic significance only where concentrated in a limited area., especially in areas with young volcanism, graben structures or fold belts. Geothermal energy occurs as various types such as hot water, wet steam, dry steam or as geo-pressure zone. Similar to mineral exploration, the systematic reconnaissance and prospecting for geothermal energy includes geological and hydrological target selection studies, airborne geophysical surveys, ground geophysical and geochemical surveys, followed by exploration drilling, geophysical drill hole logging and pump tests (similar to hydrogeological investigations for a mining project).

The utilisation of geothermal energy comprises usually the pumping of hot water from deep drill holes. The securing of the drill hole, casings, well head, etc. will follow the safety norms in mining. Usually, the hot water is used directly for heating purposes or for touristic and balneological purposes.

C. Use of mines for purposes other than mining

The proposed Minerals Act Amendment Bill considers in the amended section 2 to include the utilisation of a mine for purposes other than mining into the stipulations of the Minerals Act.

In the common usage of the mining industry, the term „mine“ refers to the entire workings, installations, plants, machinery and equipment, both underground and on surface, which are necessary for mining. „Underground workings“ are the underground openings of mines.

The use of a mine for purposes other than mining comprises mainly the use of the underground workings for tourism, medical purposes, test mines, training mines, waste repositories, and for storage and protection in times of crisis.

A distinction is necessary between the underground working of an abandoned mine, which were backfilled or closed, and those, which remained accessible. In the first case, usually concerning mines which are closed for considerable time and for which mining rights have

usually expired, the underground workings need to be reopened and rehabilitated. Especially when underground workings are used for tourism, for medical purposes or as underground repository, the existing workings have to be changed, adapted, and expanded. In the case of test mines or training mines, the drifting and advancing of the underground workings forms an important part of the overall purpose.

In several cases, geoscientific and geotechnical, especially rock mechanic investigations are needed to establish the suitability of the underground workings for the intended purposes. This applies especially to the use as underground repository or as a test mine.

The mining technology and measures to be applied are the same as required for the mining of mineral deposits.

Since the efficiency of the safety measures and installations installed at the time of closure could be impaired, possible adverse effects have to be considered during reopening and rehabilitation. This requires detailed data concerning the situation underground, underground infrastructure, old mine plans, etc.

New underground development is required usually for utilising underground workings as visitors mines, for medical purposes or as underground repositories. Usually this comprises drifts, caverns and less frequently inclines. This underground development takes place in the same manner as underground development in an operating mine, and may also affect adjacent old workings as well as safety measures taken at the time of mine closure.

The intended purpose of utilising the underground workings determines their adaptation. Usually only a part of the existing workings is utilised. However, this part is connected inseparably with other workings, affecting especially their ventilation and dewatering. These workings require regular inspections and appropriate measures for maintenance of supports and other installations, especially concerning ventilation and dewatering. Continuous monitoring and maintenance of the entire mine for all measures related to mine safety (including mine rescue) are needed to the same extent as before the closing of the mine.

V. OBJECTIVES AND TASKS OF THE MINING AUTHORITIES AND INSTITUTIONS

A. Objectives and activities of a Mining Authority

The legal norms related to mining are based world-wide on the assumption, that the mining sector has a special risk profile, and therefore requires special professional qualifications. This special risk profile is caused by the geological factors and the related inherent risks. Because of the risks associated with mining, safety precautions and safety measures are of significant importance. Therefore, mining laws incorporate norms and institutes, which occur not at all or only occasionally in the laws governing other industrial sectors.

Already in early times, these special risks, led to the institution of special authorities to regulate and supervise the mining sector; which were staffed by officers with an educational mining background.

The activities of a mining authority comprise the tasks related to mineral policy and the preparation of acts of parliament or government (preparation of drafts of applicable laws and regulations) and the supervision of the mining sector and the applicable technology. The main task is the implementation of the mineral law and the protection and promotion of the macro-economic interests of the mining sector. The following has to be defined for the activity of a mining authority: competence – usually structured in two instances -, organisation, and authorisation concerning supervision and the issuing of instructions.

In Namibia, the first instance, represented by the Mining Commissioner and the Chief Inspector of Mines as statutory appointees by the Minister of Mines and Energy, administrates the mining law. The second instance acts as the highest administrative entity, issues mineral licences and decides on appeals against decisions of the first instance.

A mining authority has to fulfil the following tasks:

- Promulgation of regulations, guidelines and norms related to mining
- Examination of application for mineral titles, granting of mineral titles and determination of

prospecting and mining areas

- Granting of applications and permits to create the framework required for the infrastructure necessary for mining
- Control if mining operations are planned and conducted in an economically determined manner, to ensure that mineral resources are mined rationally from the deposit and are utilised optimally in the subsequent beneficiation
- Visit and inspection of the operational departments of the mines, to ensure that the obligations according to mining laws and regulations are fulfilled in an orderly manner
- Control, if there are grave incipient hazards for the mining operation or the public interest, especially concerning life or health of persons
- Speedy inquiry, in the case of grave accidents or injuries to persons, into the conditions at the site, the cause of the accident and its consequences, and control and supervision of the rescue measures and the remedial and preventive measures taken by mine management or operator
- Measures for environmental protection, the protection of the surface, and the safety of the surface after the cessation of mining activities

If deficiencies are observed, which obviously and directly affect public interest, or safety and health of persons, and which can not be corrected immediately, instructions for remedial measures have to be issued to the necessary extent. They may extent from a temporary stop of the respective working area, equipment or plant, to a temporary stop of the operation, and even to the cancellation of the legal basis for the mine, such as the cancellation of permits or even the mining licence. In the case of violations of laws and regulations or of non-compliance with instructions issued by the mining authority, the laws and regulations should enable the mining authority to prescribe fines. In Namibia, such violations are offences to be judged in the magistrates court or high court, with penalties decided by the judge under the relevant stipulations of the Minerals Act.

The holders of mineral titles and mine operators are obliged to provide any assistance and co-operation required by the mining authority to the execute their supervisory function, to provide unhindered and unlimited access to all necessary materials and documentation, to provide all necessary reports, and to answer all questions pertaining to the technical operation. They are also obliged to enable the mining authority to visit or inspect at any time all installations and departments of the mine. The mine inspectors are also authorised to satisfy themselves on the knowledge of mining law and regulations of the technical staff of the mine, to procure copies of mine maps according to their requirements, and to instruct the preparation of maps, sections and documentation required for their inquiries.

It appears in conclusion as expedient and logical, to include those economic activities, which aim at the use of the crust of the earth for purposes other than mining, into the supervisory powers of a professional mining authority.

B. Legal regime concerning permits and commissioning for the use of mines for purposes other than mining

The above-mentioned activities, as far as they are related to the prospecting and exploration of geothermal energy or the investigations of the suitability for underground repositories, can be conducted according to work programmes to be approved by the mining authority. The Minerals Act of Namibia refers to such work programmes in sections 42, 65, 75 and 87.

The drilling of boreholes including geothermal wells – see also section 53 of the Minerals Act – as well as the construction of exploration adits, drifts, and shafts will require the consent of the authority. Permits for the use of underground workings for storage, the reopening and rehabilitation of old underground workings and the use of mines for purposes other than mining have to follow the legal safety norms usually applicable in the mining sector.

The use of mines for tourism will require in particular measures to exclude any hazards for the visitors, such as stipulations that visitors are always guided by experienced personnel, that safety equipment is available, and that adequate rescue and first aid measures and equipment are sufficiently available. If mine tours take place parallel to mining operations,

measures are necessary to exclude any mutual detrimental affliction or hindrance. Pertaining recommendations are also provided in chapter 3 of the First Interim Report.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations for the draft Minerals Act Amendment Bill and the draft Regulations to the Minerals Act take into consideration the First Interim Report, the general considerations concerning regulations (chapter 3), the comments on the draft Mineral Act Amendment Bill and the draft regulations to the Minerals Act (chapter 4), and the general considerations on mining and the resulting suggestions (chapter 5).

A. Draft Minerals Act Amendment Bill

1. According to the draft amendments of sections 18(2), 21(2), 33(2), 49(2)(b), 60, 68, 79, and 91, the Minister prescribes by regulation the prescribed manner, form and content for applications for non-exclusive prospecting licences, claims and the four types of mineral licences. The draft amendment for section 138A(a) contains a general enabling provision. The amendments of the sections listed above contain no criteria for the content of the respective regulations. From the formal legalistic point, two alternatives are possible:

(a) The sections listed above contain a clause for the general content of the respective applications, such as e.g. „An application for shall contain especially Details are prescribed by the Minister by regulation under section 138A(a).“

(b) General items concerning the content of the various applications are included as a demonstrative list in section 138A(a). The previous sections would then refer to this in such form: „... shall be made in a manner as prescribed by the Minister by regulation in terms of section 138A(a).“

2. According to the draft amendments of sections 45(1) lit. (a), (d) and (e)(i), 66(1) lit. (a) and (d), 76(1) lit. (a), (d) and (e)(i), 89(1) lit. (a) and (d), and 101(1) lit. (a), (d) and (e)(i) of the Minerals Act, the contents of the reports to be submitted by the holders of the various mineral rights at various intervals are prescribed by the Minister by regulation. The essential content of such reports is not contained in the draft amendments. Legalistic measures as described above (recommendation 1) are suggested. The enabling provision should extend to paragraph 89(1)(e) in order to avoid a discrepancy with section 16 of the draft regulations.

3. According to the amendment of section 2(2) of the Minerals Act, the utilisation of the earth crusts for purposes other than mining also requires mineral licences. It is recommended to list those parts of the Minerals Act which apply for these purposes as *mutatis mutandis* provisions.

B. Draft Regulations to the Minerals Act

1. Sections 5, 7, and 8 of the draft regulations contain a provision for the delegation of powers granted to the Minister under the enabling provisions of the Amendment Bill to the Mining Commissioner; the content of this delegation is not defined. It is suggested that the Minister promulgates such a regulation and the Commissioner acts as first instance for its implementation. Such a procedure has been adopted in section 6 of the draft regulations for the amended section 33(2) of the Minerals Act.