

Attachment to Coordinator Paper: (4) Guidance Note on the Tax Treatment of Decommissioning for the Extractive Industries¹

1 Contents

1	Executive Summary/ Purpose	3
2	Status of this Note	4
3	Terms Used	5
4	Overview of Decommissioning Issues.....	6
4.1	The issues.....	6
4.2	Key drivers in determining decommissioning principles	7
4.3	Approach to a policy framework for decommissioning.....	8
5	Principles of a Decommissioning Regime	10
5.1	Guiding principles	10
5.2	Politics, public concern and reputation	11
5.3	National and international legal requirements	11
5.3.1	International petroleum legal requirements for decommissioning	11
5.3.2	International best practices for mine closure.....	12
5.4	Establishing decommissioning and remediation costs	14
5.5	Taxation framework and provisions for decommissioning.....	14
5.6	Stakeholders	14
5.7	Environmental impact.....	16
6	Regimes for Delivering Decommissioning Principles	17
7	Quantification of Decommissioning Costs.....	19
7.1	Framework of quantification	19
7.2	Costs.....	19
7.2.1	General.....	19
7.2.2	Cost estimation in the petroleum industry.....	19
7.2.3	Cost estimation in the mining industry.....	20
7.3	Mechanisms to ensure accurate estimation of costs and prudent provision reporting	20
8	Tax Policy Issues in Decommissioning	22
8.1	Importance of good tax policy and law design	22
8.2	Behavioural risks from interaction with tax regime on decommissioning	22
8.3	Policy approaches to tax deductibility of costs.....	23
8.3.1	General.....	23

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8.3.2	Recognition of decommissioning costs for tax deductibility	23
8.3.3	Instruments to give assurance on decommissioning.....	24
8.4	Financial security guarantees	24
8.5	Current cash flow/ existing operations.....	25
8.5.1	General.....	25
8.5.2	Use of loss carry-backs.....	25
8.6	The use of trust funds or other funded mechanisms	26
8.6.1	General.....	26
8.6.2	Structuring options for decommissioning funds.....	26
8.6.3	Tax treatment of the funds.....	27
8.7	Provisions.....	27
8.8	Special considerations for the petroleum sector.....	28
8.9	Special considerations for the mining sector.....	29
9	Applied Tax Treatment Issues in Decommissioning	30
9.1	Accounting for costs	30
9.2	Allowability of costs	30
9.2.1	General principles	30
9.2.2	Complex cases.....	30
9.2.3	Multiple operator cases/combined fields.....	31
9.3	VAT/GST and services tax issues around decommissioning	31
9.4	International tax issues.....	32
9.4.1	Anti-avoidance/safeguard provisions	32
9.4.2	Tax treatment issues in joint development areas and contiguous fields	32
9.4.3	Interaction with PE provisions	32
9.5	Tax treatment of contractors undertaking decommissioning work.....	32
10	Mechanisms to Resolve Issues/ Dispute Resolution.....	34
11	Annex: Taxation of Environmental and Restoration Costs in Zambia	35
1.1	Introduction	35
1.2	Type of mining in Zambia.....	35
1.3	Case study – environment restoration costs	35

1 Executive Summary/ Purpose

The extractive industries have an important role in supplying key resources needed for the development of any economy. The mining and the petroleum industry are the two main extractive industries, characterized by large multi-year investments. The key drivers affecting decommissioning of mines and petroleum facilities once production comes to an end are:

- Politics,
- Public concern and reputation,
- Legal requirements,
- Cost,
- Taxation framework,
- Technical feasibility,
- Health,
- Risk and safety,
- Environmental impact and
- Other users of the land and the sea.

The cost of decommissioning and remediation is driven by international and national legal frameworks, which define what, when and to what degree the sites need to be reclaimed and rehabilitated. The activities related to the extractive industries in the cessation phase usually include cost estimates and associated provisioning for the facilities mining and oil companies operate. The development of taxation guidelines for worldwide decommissioning and remediation could help countries with extractive industries to build awareness before policy is agreed and decision are taken.

This Note principally aims to provide governments with insights from other regimes, and some examples of good practices, to enable them to design their tax regime for decommissioning in such a way as to avoid impeding the effective decommissioning of facilities. However, in order to be able to make informed decisions in tax policy design, it is necessary to understand the broader decommissioning regime to properly contextualize the taxation issues.

This Note therefore:

- First addresses the issues involved in decommissioning and remediation of facilities used to extract raw materials in the mining industry and the petroleum industry once extractives are depleted and those facilities become redundant.
- From this discussion, it sets out the framework that policymakers can use to determine principles for decommissioning as a matter of national policymaking.
- It then sets out an approach to be followed to ensure that decommissioning is achieved and methods to quantify the costs of the decommissioning programme.
- It finally discusses the tax treatment of those costs, the challenges that arise from unclear treatment and alternative approaches to ensure deductibility of costs.

2 Status of this Note

This note is for guidance only. It is intended to address the tax treatment of decommissioning in the extractive industries in brief form, to raise awareness of potential challenges as well as to aid those faced with these issues to make good policy and administrative decisions.

3 Terms Used

4 Overview of Decommissioning Issues

4.1 The issues

The two main extractive industries are mining and petroleum; within each of these categories, there are a range of technology requirements depending on the resource to be extracted, its location (e.g. onshore or offshore) and the facilities needed to process the extracted resource. Such facilities may require large multi-year capital investments in infrastructure or access to additional inputs for processing the output of natural resource projects. As the mines and the oil and gas facilities become depleted, the now redundant facilities require decommissioning and remediation.

Decommissioning is a complex multi-disciplined process with an overall timescale normally lasting several years, requiring the management of diverse issues and involving international and government agencies, mining or oil producing companies, third party contractors, local communities, and non-governmental organizations. Decommissioning is part of the life cycle of an installation.

Within that life cycle, the financial and technical planning of decommissioning and remediation phases often receive insufficient consideration during the planning, design and operation phase of these facilities. This has led to many unforeseen issues and challenges as mines and petroleum facilities reach the end of their economic life.

There is also a legacy of mines and oil and gas fields that have already been closed and decommissioned in the last century and which today are creating environmental and risk issues, as there are no clearly responsible parties and/or no financial funds reserved to address the emerging decommissioning and closure issues. Furthermore, many of these emerging legacy decommissioning issues contribute to a negative opinion and reputation of the industry and cause communities to oppose plans for new extractive industry operations, by the same or different companies.

Mining operations tend to impact significant areas of land. The closure phase must comply with sector law and regulations and/or the closure, decommissioning and remediation terms in lease. Typical steps required to comply with the sector law and regulations and/or the closure, decommissioning and remediation terms in lease are:

- Clarification of the sectorial and national law, regulation and guidelines applicable to the closure of the mine
- The removal or conversion of infrastructure
- The stabilization of open pit or underground workings (foundations, mine shafts, buried pipelines, etc)
- Tailings, rock stock piles, etc from the mines, drill cuttings, shell mounds, wells etc from the petroleum industry require rehabilitation and restoration
- Management of surface and groundwater and air quality
- Post-closure monitoring to ensure that potential environmental issues are effectively managed
- Recognition of residual liabilities

4.2 Key drivers in determining decommissioning principles

The key drivers, which affect the decommissioning of mines and petroleum facilities, are:

1. Politics, public concern and reputation
2. National and international legal requirements
3. Cost and economics
4. Taxation framework
5. Technical feasibility
6. Health, risk and safety
7. Environmental impact
8. Other users of the land and the sea

The above list is a generic example and the elements are not ranked in order of importance, and policymakers should decide the weight to be given to each factor based on the economic conditions, and policy priorities of their own country for an overall decommissioning regime. Further, within that national approach, it is recommended that the ranking of each facility in the country against this criterion should be carried out on a case-by case basis.

The political and community impacts of the closure of major facilities in a community make decommissioning more difficult. There are often profound economic consequences experienced by local communities or host nations in association with mine shutdown and the decommissioning of petroleum facilities. Environment, sustainability health and security (“ESHS”) issues may be especially complex in the social context and provisions may have to be made for retraining workforce, development of sustainable economic alternatives to mining and petroleum activities, or the management of reduced-scale and downsized facilities. This also triggers intense and detailed scrutiny of the decommissioning and closure process by the affected communities and the local and federal government.

Generally, the nature of traditional onshore and offshore upstream exploration and production (“E&P”), i.e. hydrocarbon operations, result in a smaller footprint than that of most mining operations. Hence, the scale of land rehabilitation, re-vegetation and other reclamation activities associated with mining does not typically apply to upstream hydrocarbon operations. Nevertheless, closure phases of oil and gas fields comprise numerous complex and costly activities such as:

- Clarification of the sectoral and national law, regulation and guidelines applicable to the decommissioning and remediation of the petroleum facility (onshore or offshore)
- Interpretation of law and regulations to produce environmental, safety and technical “Rules for Decommissioning”
- Development of the case-specific decommissioning and remediation option, evaluation and selection process
- Execution of a public and government review of the decommissioning option selection process and outcomes
- Preparation of decommissioning engineering, permitting, project execution and dismantling, and removal of structures used during resource exploitation

- Implementation of remedial measures to manage ESHS issues remaining from operations or resulting from cessation of operations and decommissioning activities
- Restoration of the site to an agreed-upon use and quality in line with the expectations of government authorities, relevant stakeholders, and nearby communities
- Final survey and verification
- Achieving project signoff by government
- Assessment of any future liability

As many of the existing petroleum fields are in decline and mines are nearing depletion or the economic limits of extractability, closure, decommissioning and rehabilitation activities are expected to increase. This closure process will result in a complex sustainability issue which is part of the natural life cycle of a mine or a petroleum field.

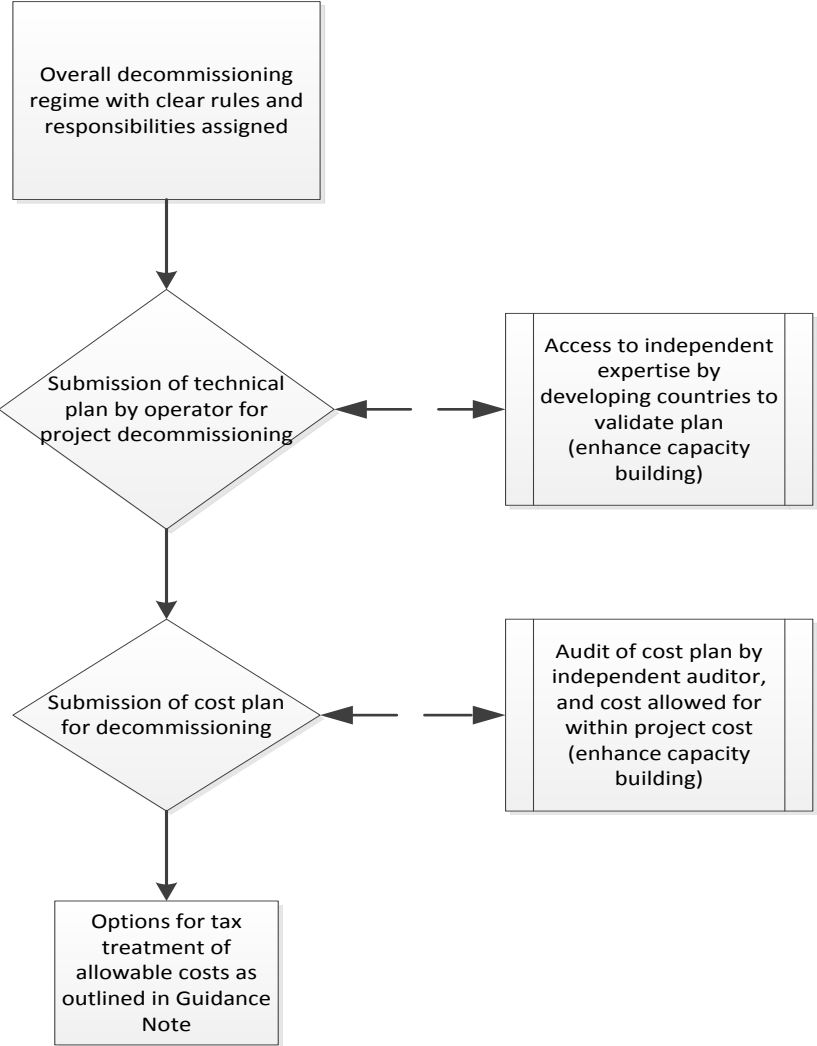
Planning for the closure process should begin during the early phases of the project life cycle, incorporating environmental concerns as well as health and safety issues and the socioeconomic needs of the nearby population.

4.3 Approach to a policy framework for decommissioning

This Note recommends that policy makers utilize the following approach in determining decommissioning policy, and to design their tax regimes to accommodate and enable these policy goals to be achieved:

1. Establish principles of decommissioning from a government perspective
2. Design the regimes for delivering decommissioning principles
3. Understand and manage the risks from the interaction between the tax regime and decommissioning
4. Consider the recommendations made in this Note on mechanisms to resolve tax issues

The overall policy approach to achieve these goals can be shown in the following diagram:



5 Principles of a Decommissioning Regime

5.1 Guiding principles

The following guiding principles are suggested for the design of the overall decommissioning regime. These principles should inform the design of the regime, which will be influenced by the key drivers mentioned in 4.2 above. Policymakers will need to determine the relative weight they wish to allocate to each of the drivers, which are discussed in detail below.

Decommissioning liabilities should be properly recognized and addressed in formal laws, regulations or guidelines, which are then specifically addressed in the obligations of the developer in the concession, licence or other contract vehicle for extraction of the resource.

Principles of decommissioning from a government perspective

1. Governments should recognize the decommissioning liabilities of a resource project, which should be explicit and visible at the start of project life cycle, and should be updated during project life. These include these categories:
 - a. Discrete liabilities
 - b. Residual liabilities
2. Government should not unwittingly be left with the liability to perform decommissioning – where liability lies should be the choice of the government of the resource state. Roles and responsibilities for decommissioning should be clearly defined at the inception phase of extractive projects
3. Roles and responsibilities should be clearly outlined in the resource extraction regime
 - a. Responsibility for execution
 - b. Responsibility for costs
 - c. Stewardship of decommissioning
4. Rules should have enough flexibility to enable a range of technology choices and be responsive to project needs:
 - a. Recognition that technology choices can change over time.
 - b. Tax regime should not restrict changes in contractual and consortium arrangements to take advantage of improvements in technology
5. Governments should make policy bearing in mind national socio-economic, environmental, finance and governance impact. Management of the regime should avoid silos – the agreement of regulators on the policy approach is essential for efficient oversight and management of the decommissioning process

As an associated point, regulators in developing countries should strive to build capacity on decommissioning matters and share knowledge among countries.

5.2 Politics, public concern and reputation

As discussed above, the effects resulting from the political and community reaction to the closure of major facilities in a community can heavily influence the decommissioning process. If not properly managed, a destructive distrust can develop between the principal players. If any indication of non-disclosure emerges, this can lead to catastrophic outcomes, such as the Brent Spar incident.

It is advised that the selection of the decommissioning/closure option must be managed in a transparent process with a fully developed public audit trail. The three major components that need to be managed are:

- National and local politics
- Public concern
- Reputation

The development of proper decommissioning and closure process includes guidance from stakeholder groups representing all national and local interests including representatives from the petroleum and fishing industries, environmental non-governmental organisations, as well as government officials in the areas of mining/ petroleum regulation, mining/petroleum safety, fishing, navigation and all affected users of the land and the sea in the region.

The objectives of a stakeholder policy development process usually are:

- To develop:
 - principles/guidelines to apply to the closure/decommissioning of existing facilities
 - principles/guidelines to apply to the design, operation and future closure/decommissioning of new facilities
 - to the extent possible, consensus between stakeholders
- To provide
 - regulators (both Designated Authorities, the Department of the Environment and Water Resources and others) with guidance on how applications for closure/decommissioning are to be assessed
 - industry with guidance as to what will be expected of them in respect of closure/decommissioning, with the aim of reducing risk and uncertainty
 - opportunity for public comment and involvement in the development of government policy
- Recognition of possible future liabilities and how they could be managed

5.3 National and international legal requirements

5.3.1 International petroleum legal requirements for decommissioning

Since 1958, international conventions have stated that all offshore platforms must be decommissioned at the end of the field life. As the complexity of the offshore oil and gas facilities has evolved, the

challenge to balance the total removal with environmental concerns, safety, technical feasibility, cost, etc has forced an evolution in the decommissioning law and regulations.

The optimal solution may not be the total removal of a specific oil and gas facility, but a carefully balanced compromise within the relevant legal framework. It is important that Governments incorporate flexibility in their national legal framework. The present international laws and conventions, listed below, are applicable in the majority of the African Countries and have built in such flexibility.

- United Nations Convention on the Continental Shelf (Geneva Convention), 1958
- Third United Nations Convention on the Law of the Sea (UNCLOS III), 1982
- The International Maritime Organisation Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone (IMO Guidelines), 1989 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention – LDC), 1972; *signed by Angola, Cote d’Ivoire, Egypt, Equatorial Guinea, Kenya, Libya, Morocco, Nigeria, Sierra Leone, South Africa, Tanzania, Tunisia.*
- Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters (London Protocol), 1996; *signed by Angola, Egypt, Kenya, Sierra Leone, South Africa.*

These international laws and regulations are supplemented by relevant national and state legalisation. The national and state legalisation can have an impact on the decommissioning of petroleum facilities in respect of environmental, safety, waste management, socio-economic as well as tax and customs considerations. Furthermore, due to the potential socio-economic impacts, the decommissioning of redundant oil and gas facilities may often become a regional issue.

The decommissioning of pipelines of the petroleum industry is not covered in international law and usually this issue is managed in national legalisation. Similarly, there is no guidance on the treatment of subsea equipment located on the seabed. But for both pipelines and subsea facilities there are two clear principles in international law (from Geneva Convention 1958, UNCLOS III 1982 and IMO Guidelines 1989):

- No interference with navigation, fishing and other users of the sea
- All appropriate measures must be taken for the protection of the living resources of the sea from harmful agents

These are the guiding principles of countries’ national law regimes, which cover pipelines and subsea facilities.

For installations located onshore, sectoral, regional and national laws and regulations are applicable.

5.3.2 International best practices for mine closure

National mine closure policy is usually dictated in by a country’s constitution that mandates a healthy environment for its citizens or by international treaties and agreements. At the national level, individual national sectorial policies and legislation (other than those for the environment and mining), various

Executive Decrees and specific Local Government Agreements (often with industry) all must be provided for as part of an overall national program for acceptable mine closure. These are in addition to specific instruments under Environmental and Mining legislation that require putting in place policy and legislation for Environmental Impact Assessments, Social Impact Assessments, Mining Plans, Standard Mining Agreements, bonding procedures and providing for Inter-Ministerial Agreements to achieve comprehensive mine closure and sustainable development.

Many countries do not have provisions for mine closure in their mining laws. Few governments have actual mine closure legislation. Where mine closure legislation is enacted, it is primarily with respect to reclamation and rehabilitation.

Comprehensive mine closure and all that it entails would be part of any mining planning and design if the life cycle of a mine was fully considered before establishing the mine. However, past history and present practices in many countries clearly demonstrates that this is not the case.

Countries which have enacted national mining closure law typically do so by including it directly in the national Mining Law or indirectly within the national Environmental Law but also within their Foreign Investment Laws. Compliance with these provisions is often a pre-condition of acquiring mining license rather than a matter of “best practices” which would be a far better approach. In some countries, their legislation contains only general statements with respect to “appropriate” or “reasonable” reclamation and rehabilitation with the specific issues related to mine closure normally being dealt with on an “ad hoc” basis.

In practice, however, rehabilitation, reclamation and mine closure plans vary greatly among and within individual countries, as do the requirements for bonding or other surety instruments to ensure that the plans are carried out.

The level of provision for mine closure within the mining laws and regulations of the developing countries is largely dependent on three factors:

- The age of the country’s mining law and regulations
- The activities of past mining enterprises
- Related policy and legislation, in particular environmental policy and legislation.

In many developing countries in Africa, Latin and South America and Asia, each with a long history of private sector mineral development, are characterized by having:

- A very general policy and legislation for mine closure
- A high degree of state responsibility for both abandoned and some operational mines
- Few, if any, bonding procedures to ensure comprehensive mine closure
- Providing for mine closure on a negotiated “mine-by-mine” basis.

However a few developing countries, such as Bolivia, Mali, Namibia and Zambia can be said to have comprehensive policy and legislation that provides for comprehensive mine closure and for post-mining sustainable development.

It is often the case that inadequate and unproven fiscal regimes exist in countries where post-closure sustainable development presents the greatest challenge for the government. One of the key components for successful decommissioning is a taxation system which facilitates this process.

In summary, the sector law and regulations for decommissioning provides the overall framework within which the taxation rules for decommissioning must be designed.

5.4 Establishing decommissioning and remediation costs

This subject is treated separately under Section 7 below as the accurate measurement of costs, and allocation thereof, is a significant factor in the tax treatment of decommissioning. The cost framework must remain an important driver in determining the overall approach to decommissioning. For example, a decommissioning regime where the government chooses, as a policy matter, to retain decommissioning liability and executes this process itself will still need to quantify such liability and provide for it in the extractive project contract.

5.5 Taxation framework and provisions for decommissioning

This subject is treated separately under Sections 8 and 9 below as the tax treatment of decommissioning is the main subject matter of this Guidance Note. However, the tax framework should be a driver in determining the overall approach to decommissioning. E.g. a decommissioning regime where the government chooses, as a policy matter, to retain decommissioning liability and execute this process itself will need to pay less attention to this area in the overall policy approach.

5.6 Stakeholders

Decommissioning is expected to attract increasing interest from parties both within and outside the industry, particularly with regard to issues on environmental, social and economic impact. The industry operates within a regulated legal framework overseen by national regulator(s).

The framework seeks to achieve effective and balanced solutions for decommissioning activities. These solutions need to be consistent with each nation's international obligation (treaties) and have a proper regard for safety, the environment, other legitimate users of the land and/or sea as well as economic and social considerations.

An important part of the decommissioning process is the identification and mapping of issues and key stakeholders, and to provide a general advice on future stakeholder engagement. Stakeholders will have a specific and defined interest in the decommissioning activities, either because they could be impacted by the decision, and/or they can have an impact or influence on the planned activity. Involving or engaging stakeholders can take a range of different forms, including information giving, consultation or dialogue.

The design of a stakeholder engagement plan or guidelines could be a useful tool to demonstrate how engagement is an integrated part of achieving a robust, sustainable and acceptable decommissioning programme.

Key questions in a stakeholder engagement process;

- Which stakeholders to engage
- How to engage
- When to engage

Well managed stakeholder engagement can improve decommissioning plans and make the whole process more efficient. Stakeholder engagement can also make the outcomes of the decommissioning project more sustainable. It can be cost efficient and reduce the potential of conflict, if it is done properly. The essential characteristic of stakeholder engagement is that it seeks an effective and balanced decommissioning solution.

The key stakeholders are the governments of resource-rich countries, specifically the regulatory authorities, institutions, and ministries responsible for

- administering mineral resource and oil and gas extraction contracts;
- issuing environmental permits for exploration, exploitation, and closure; and
- ensuring that legal, financial and technical measures are in place to address temporary shutdowns as well as complete closure and decommissioning at the end of the productive life of oil and gas and mining operations.

A list of stakeholders would include:

- Government, Authorities and Politicians
 - National (Ministries and Agencies)
 - Regional/District
 - Local (Port Authorities, Community)
- International and Regional Regulators
- Commercial Interest Groups
 - Decommissioning Supply Industry
 - Local Industry
 - Investors
 - Unions/Employee Organizations
- Public
- NGO Groups
 - Environmental
 - Marine Life
- Other User of the Sea
 - Shipping & Navigation
 - Fishing Industry
 - Tourist Industry
 - Navy
- Media
- Universities and Research Organizations

5.7 Environmental impact

Once closure and decommissioning strategies have been decided upon, it will be necessary to develop an Environmental Impact Assessment for the relevant options, rank the options and to communicate the outcome to various stakeholders. No mine shut in² or decommissioning study would be complete without proper impact assessment.

The purpose of an impact assessment is to clarify the effects of measures that may have significant consequences for the environment, natural resources, and society. The impact shall ensure that these effects are taken into account when the measure is planned and when decisions are reached regarding whether, and on what conditions, the measure may be carried out.

Examples of environmental drivers are:

- Protection of the environment
- Precautionary principle
- Definition of end state, e.g. how clean is clean
- Grandfathering
- Understanding and managing emission paths
- Characterization and management of waste
- Decommissioning plan and measurement of impacts

The inclusion of the appropriate stakeholder group is essential in environmental impact assessments. The group should balance different policy priorities and set the standard for the assessment that is appropriate to national needs, and in line with national policy priorities. It is important to recognize that there is a trade-off to be achieved, and ultimately sovereign countries must determine the standard to be achieved, while bearing in mind international minimum goals.

A model Environmental Impact Assessment document will be attached as an Annex.

² A state or period in which an extractive facility well has available but unused capacity

6 Regimes for Delivering Decommissioning Principles

The decommissioning phase should be an integrated part of a projects life cycle. The earlier an explicit decommissioning regime is developed, which clarifies the obligations and liabilities for all responsible parties, the better. Decommissioning regimes could be characterized by:

1. Government assumes financial responsibility for all decommissioning costs and final disposal of disused installations
Production Sharing Agreement (PSA), Joint Operating Agreement (JOA), license agreement states that the responsibility belongs to the Government, hence also the liability
 - a. According to the Agreement, the property of the installations belongs to the Government. The private sector has (no obligation to contribute to the decommissioning cost.
 - b. Contribution to decommissioning and disposal from the private sector is “build in” as part of the initial agreement between private sector and Government, hence no additional direct or indirect liability in the cessation phase.
 - c. Government is responsible, but private sector has to contribute with their share of the decommissioning costs. The Government is the “operator” of the decommissioning and disposal activities.
2. Private sector responsible for all decommissioning and final disposal of disused installations, hence all liability.
 - a. Private sector overall responsible hence covers all costs relating to the cessation phase.
 - b. Government to cover their part of the costs, but the operator/license has the responsibility to execute the removal.
 - c. Government covers all the costs, but operator/licensee acts on behalf of the Government to execute the removal.
3. Shared responsibility between government and investor on decommissioning and final disposal of disused installations.
Different degrees of shared responsibility between government and private investor can take place under this regime.
4. Responsibility shared between governments on cross-border Joint Development Areas or other joint ventures.
In some cases, a field can cross over two or more countries; hence this case needs to be addressed separately because it involves the legal and fiscal framework in more than one country.

A JOA between the involved oil and gas companies, and cross bordering treaties between respective involved Governments needs to be in place. There are several cases in Europe (Norway-UK), Asia (Thailand-Malaysia, East Timor-Australia) and Africa (Ghana-Côte d’Ivoire and Kenya-Somalia) where installations at the field are either located at one or both of the countries.

In the event that an installation crosses two or more countries, the following outcomes are possible at the respective times of the project's life cycle:

- a. Field in planning phase.
 - i. Treaty signed including handling of decommissioning and final disposal between the involved countries before the decision to develop the field.
 - ii. Treaty signed, but decommissioning and disposal not included in the Agreement.
- b. Field in operation.
 - i. Treaty signed with the respective countries, decommissioning and disposal included in the Agreement.
 - ii. Treaty signed, but decommissioning and disposal not included in the Agreement, hence unclear outcome of discussion between the involved countries.³
- c. Field in the planning or developing phase developed in one country. At a later stage it was discovered that the reservoir also covers other countries, hence the other countries need to be included.

³ One example is the Frigg case in Norway. Decommissioning was initially not included in the initial treaty between Norway and UK

7 Quantification of Decommissioning Costs

7.1 Framework of quantification

International and regional legal frameworks drive the cost of decommissioning and remediation, assuming that the country has ratified the relevant treaties and agreements. This international legal framework defines what must be removed, when it must be removed, to what degree the sites need to be reclaimed and rehabilitated. But these laws and regulations are relatively abstract and rely on, when available, more detailed national and state law, regulation and guidelines.

These country specific laws, regulations and guidelines are used to define the decommissioning and rehabilitation specifications in technical and environmental terms. These specifications are the basis of the final engineering and environmental solutions, which generate the decommissioning cost estimates. Accurate decommissioning costs are critical, as a shortfall in accrued provision at the end of the life of the petroleum field and mines means that the state and other partners will have to fund this shortfall.

Usually petroleum and mining companies generate the decommissioning cost estimates and hence the provision since they are operating the facilities.

According to international accounting standards (IAS 37), companies are to provide provision for the liability for the decommissioning of redundant facilities and remediation in their annual accounts.

7.2 Costs

7.2.1 General

Decommissioning cost in the petroleum industry worldwide is estimated to be billions of dollars and the trend is increasing. Planned costs have often been lower than actual costs, especially for the bigger operations.

The costs have risen in recent years due to stricter sectoral, national and international legal frameworks, higher environmental focus, HSE, increased focus on well operations and P&A activities, limited experience in complicated operations, final disposal and requirement to recycle more. Decommissioning costs can be reduced by establishment of a more flexible national and international legal framework, new technology and by finding more cost effective ways to organize the removal process. It is especially important to include decommissioning in the early planning phase of a project - life cycle perspective, therefore fostering economies of scale by bundling of projects.

7.2.2 Cost estimation in the petroleum industry

Sources of data on estimating decommissioning costs in the oil and gas sector describe the possibilities and limitations of using the various sources for the purpose of our cost savings estimates.

Oil and gas operators make periodic assessments on their expected decommissioning costs as a basis for their provision requirements. These are generally calculated for individual platforms using a quantity x resource x time-method. The quantity (jacket and top side weight) is calculated once while the rate (price per unit) and time (heavy lift vessels duration in days) are updated on a regular basis. Some

operators make these calculations in-house with their own cost models that might be based on benchmark data. Other operators use external engineering consultants to make cost estimates. For structures where decommissioning is expected to occur in the medium- to long-term, these calculations tend to be based on a cost per unit. For structures where the decommissioning date lies closer to today, the calculations will be more detailed. There is no agreed standard established by the industry.

7.2.3 Cost estimation in the mining industry

Practice in the mining industry differs considerably. Chilean law requires that mining companies provide financial guarantees for the closure of currently active and future mining operations. The value of the guarantee is to be based on the estimated closure cost for the mine (presented in the closure plan) and the planned operating life of the mine. The responsibility for reviewing and approving both the closure plan and the estimate of closure costs falls to the Chilean government mining and geology agency called *Servicio Nacional de Geología y Minería* (SERNAGEOMIN).

A national guide for the estimation of closure costs in Chile has been developed. The core of the guide is an estimation model that calculates costs based on a breakdown of the mine into a limited number of costing components and takes into account key modifying factors that are used to adjust costs, such as local geography, accessibility, and elevation.

The value of the guarantee is based on the estimated closure cost for the project, including both the execution of closure measures at the end of mine life, and a fund for the execution of post-closure measures after the completion of major closure works.

International practice in the determination of the quantum of financial provision for mine rehabilitation and closure differs.

The practices and methodologies from the selected countries can be categorized as follows:

- Area-based, that is the quantum for financial provision is calculated by multiplying the area of the mining operations by a fixed standardised unit rehabilitation cost; and/or
- Project-based, where the costs of each component of rehabilitation of the mine site are determined and totalled for the life of the mine.

7.3 Mechanisms to ensure accurate estimation of costs and prudent provision reporting

Specific decommissioning plans and associated cost estimated are generally set out in regulations that have their basis in national legislation. The decision which of the associated costs should be included in the decommissioning cost estimate is governed by the legal and administrative framework that defines the scope of decommissioning under the relevant regulatory scheme. However, specification in the national law and regulations varies among the countries, from clearly defined to countries where these issues are hardly included in the legislation.

The cost estimates are important for ascertaining that necessary funds are available to cover the actual costs of decommissioning the installations. There is considerable difference in the format, content and

practice of cost estimates, which makes it challenging to compare estimates, even for similar types of installations. The reasons are largely different legal requirements in various countries and established practice.

Owners/licensees are generally responsible for developing cost estimates and funding mechanisms. They are required to submit the estimates to the regulator for review or approval.

The types and extent of assumptions and boundary conditions typically applied in cost estimates have a major effect on the overall costs. Regulators can specify boundary assumptions as a way of ensuring completeness in the coverage of the cost estimates, as well as the quality of the analysis. This could limit cost-underestimation and over-provision, given that the regulator has the right knowledge and competence.

Standard definitions of cost items should be established. Development of an international guideline or standard list of items for cost estimation, could establish more consistency and comparability if countries used common or comparable definitions of cost elements and cost groups.

Developing valid cost estimates requires not only good definitions and specific assumptions, but also good data; hence the accuracy of cost estimate depends both on the methods used and quality of the data.

In some industries, quality control by the regulator is established as an important part for validation of cost estimates; regular tracking of cost, benchmarking of actual experience against the cost estimates, requiring full documentation from the operator of how the cost estimate was developed.

The aim should be to develop a standard tool or procedure with which national cost estimates could be mapped for the purpose of comparison primarily nationally, but also internationally. One advantage of such comparison is to create more transparency of cost estimates and build confidence in the estimating basis.

8 Tax Policy Issues in Decommissioning

8.1 Importance of good tax policy and law design

There is a need to understand the wider policy towards decommissioning in order to avoid impeding effective decommissioning of facilities. Good tax policy should be an enabler and should incentivise operators to bear in mind and allocate funds appropriate for decommissioning costs over the life of the project. Tax policy should also recognize the need for flexibility in regime design, as different operators will have different accounting and treasury considerations to take into account in allocating such funds. The goal of tax policy should be to enable decommissioning within the technical requirements agreed, and to provide tax relief for the costs estimated in line with Section 7 above.

In common with other areas of tax treatment of the extractive sector, an initial issue to be decided is the location of the income tax provisions for the sector. There are three options:

- A separate omnibus law that is applicable to extractive industries which covers both tax and non-tax subjects
- A chapter or part in the corporate income tax legislation that covers the extractive sector, and includes decommissioning related provisions
- The sector legislation, meaning that the oil and gas law and/or the mining law, as appropriate, would have a tax chapter.

The key consideration in the location of the legislation is that duplication should be avoided and definitions harmonized to the extent possible. This will particularly be the case where the country chooses to place the tax rules in the tax legislation, and the general decommissioning requirements in the sector legislation. Care needs to be taken to ensure that the tax law follows the definitions and tests used in the sector legislation, and does not seek to duplicate or create alternative tests for tax purposes, whether by statute or by regulations.

8.2 Behavioural risks from interaction with tax regime on decommissioning

The tax regime can have the following behavioural impacts:

1. Governments may not recognize that the state shares the costs of decommissioning through the tax system and hence may not plan appropriately.

Tax rules may:

2. Influence or even impede the choice of who actually does the decommissioning
3. Prevent “time being your friend”, e.g. investment tax credits may delay the sourcing of equipment needed
4. Encourage the removal of more equipment due to the future application of the precautionary principle ultimately requiring removal of equipment by the investor.
5. Promote premature decommissioning
 - a. Restrictions on loss carry backs

- b. Entity segregation for tax purposes, thus restricting loss transfers
 - c. Restrictions of transfer of the resource asset to late life developers.
- 6. Promote only a standard decommissioning approach rather than a bespoke approach.
- 7. Have an overbearing effect on the selection of the method of developing resource projects, thus influencing the ultimate decommissioning method and approach.
- 8. Influence the premature shutdown of the infrastructure which will result in premature decommissioning of assets.
- 9. Stop alternative uses of resource fields and therefore promote premature closure or delay decommissioning.
- 10. Advantage multi field investors over single field investors which will reduce the investor pool.
- 11. In case of Joint Development Areas (JDAs), different tax rules in the partner jurisdictions will add to the risk that incentives and obligations are misaligned, e.g. that costs are split disproportionately among the countries involved.

8.3 Policy approaches to tax deductibility of costs

8.3.1 General

As a general principle, qualified decommissioning costs should be considered a business expense and the corporate income tax system should allow deduction from taxable income. The adoption of a clear decommissioning regime, with quantification of costs, should enable an outright deduction for such expenditure. Such treatment will also avoid technical arguments as to whether decommissioning expenditure is revenue or capital in nature. Deductibility can be considered valid under general principles; as the expenditure is incurred at the end of a project, the contractor does not use the expenditure to earn income and such costs may simply be considered operating expenses.

While decommissioning costs are quite significant, these costs are usually incurred at a time when there is little or no income from the project. Such costs therefore result in a final or terminal loss in relation to that particular project. The core challenge is therefore ensuring deductibility of costs where there is no income for the losses to be applied against.

Where the operator has a single project in the country, the loss cannot be carried forward to a subsequent tax year because the holder of a mining or petroleum right ceases to have income-earning operations in the country. Where the operator has multiple projects, deductibility of such costs may still be restricted under general rules, e.g. if the country in question uses a ring fencing approach, i.e. restricting taxability and deduction respectively of income and expenses from a project to that project only.

8.3.2 Recognition of decommissioning costs for tax deductibility

As outlined in Section 7 above, determination of the estimated costs of decommissioning is a technical matter, for which the best expertise probably lies within the appropriate resource ministry (oil and gas or mining). It is recommended that the entire deductibility question should be conditional upon approval of the estimated costs by the resource ministry and that there should be a mechanism for the resource

ministry to notify this to the tax administration. Governments may choose to address this matter by a regulation.

It is also important for tax policy makers to recognize that the decommissioning costs estimate is an estimate only. The actual decommissioning costs at the end of the project life may be quite different due to changes in technology, the development of more innovative solutions, heightened environmental standards at the end of project life compared to the start, etc. There thus needs to be a degree of the flexibility built into the cost estimation process, and in the consequent deductibility of such costs for adjustment of the estimate over the life of the project, and at the end of the decommissioning process.

8.3.3 Instruments to give assurance on decommissioning

Given the very significant costs, it will be necessary for operators to give assurance to the country in question that decommissioning will take place at the appropriate time.

The taxation implications of the future decommissioning instruments can then be explored and understood. Examples of the decommissioning instruments used in the extractive industry are:

1. Financial Security Guarantees
 - a. Parent company guarantee
 - b. Bank guarantee
 - c. Letter of credit
 - d. Insurance guarantee
2. Current cash flow/ existing operations
3. Decommissioning /removal fund
4. Provisions – allocation of funds
 - a. Unit of Production Method
 - b. Amortisation over field life
 - c. Grant system
5. Financial Obligations
6. Farm-out
7. Liability
8. Residual liability

The taxation implications of these instruments then need to be determined and provided for in the extraction arrangements with the operator.

8.4 Financial security guarantees

This instrument refers to a guarantee provided by the operator to the government of the country to incur the agreed decommissioning costs, backed by some form of financial security. The first issue to be determined here is whether the security provided is acceptable. Ideally the resource ministry (oil and gas or mining) should first determine, as in the question of estimation of costs, whether the guarantee will in actual fact achieve decommissioning according to the agreed plan. There should be a mechanism for the resource ministry to provide clearance on the nature of the guarantee itself before tax deductibility can

be considered. It is recommended that governments address the issue of such a clearance through regulation.

There may be a cost of providing such a guarantee, either in the form of an insurance premium, or an intercompany fee to the parent company or an affiliate of the operator. This cost should be a deductible expense for the operator; in the case of an intercompany fee, the cost should not exceed the ordinary arm's length cost of the guarantee.

8.5 Current cash flow/ existing operations

8.5.1 General

Any costs actually incurred within an ongoing project towards its ultimate decommissioning should be allowable for income tax purposes.

This treatment can also be extended to a project which is at the end of its useful life where the holder of the concession has a number of ongoing operations in the country. Decommissioning costs of such projects could be met from current cash flow. Such costs can then be allowed as deductions against income from other ongoing operations. If this policy choice is made, this treatment should be made explicit in the corporate income tax legislation to avoid disputes about the appropriateness of the deduction.

There are two policy questions to consider in determining allowability of such costs across projects:

1. Do the general tax rules allow for an entity approach, i.e. where the sum of all activities of a single corporate entity are subject to corporate income tax at the same rate, or is there differential treatment provided for different sources of income?
2. Are there provision for ring-fencing of income and expenditure from natural resource extraction projects?

Deduction on a cash basis – i.e. as the decommissioning expenditure is incurred – is current practice in Australia, Denmark, Norway and the United Kingdom for the oil and gas sector.

8.5.2 Use of loss carry-backs

In most tax systems, tax losses are carried forward to the next tax year and allowed as a deduction in that year. However, the use of a loss carry back may be considered as a way to give relief to the operator in extractive projects. A special provision can be made in the corporate income tax law to allow loss carry-backs in the case of a terminal loss arising from mining or petroleum operations. This will involve reopening the tax assessment for the previous year, or a number of years and will typically result in refunds of taxes paid for such year(s).

Policymakers will need to be conscious of the government budgetary rules, and availability of funds for giving refunds; due to these issues, this may not be a viable option for many developing countries. Further, consideration will need to be given to the administration of the carry-back to ensure that it is not abused. If, however, the budgetary and administrative issues can be resolved, the use of loss carry-backs can be an effective means of granting relief. This is particularly true when ring fencing applies;

also, it allows for accurate deduction of the actual costs incurred, and avoids the issues of recapture of excess relief or allowance of further costs inherent in other mechanisms.

However, the use of loss carry-back rules alone will not address all of the potential tax implications. For example, the requirement of a history of historic profits against which to offset the decommissioning costs can create a disincentive for sales of assets at, or near, the end of life.

8.6 The use of trust funds or other funded mechanisms

8.6.1 General

Tax deductibility can take place on a pre-funded basis – i.e. relief is given when an actual payment is made into a decommissioning fund or trust fund established for this purpose. This is established practice in a number of countries, including India, Mozambique, Mexico (current draft version), South Africa and Zambia. Examples of the rules applicable in the latter two countries are provided at Annex II.

These contributions are made during the development and/or operations phase of the project and the fund or other holding mechanism is then used for project decommissioning costs at the end of useful life. Under this approach, the deduction is allowed well in advance of the date that the expenditure is actually incurred; the project operator thus gets the benefit of the deduction when it is earning income from mining or petroleum operations against which the deduction can be offset.

The ability to take the deduction at the time that the contribution is made gives a timing advantage to the operator. However the trade-off for the government is that it provides an incentive for the operator to make adequate financial provision for the decommissioning of a petroleum or a mine site. It also provides visibility and assurance to the government concerned that funds will be available at the end of project life.

In addition to ongoing contributions to the fund being deductible, a further deduction may be necessary if there are insufficient moneys in the decommissioning fund to fully finance decommissioning expenditure. It may be necessary to provide for a carry-back provision for losses incurred in the final year to enable this deduction to have effect.

8.6.2 Structuring options for decommissioning funds

It is important that the funds or other holding mechanism for the deduction are carefully prescribed to ensure that the deduction is not used to defer tax on income arising from project operations. Policymakers should consider two factors in mind in structuring the mechanism:

- Contributions to the fund must be in line with an approved schedule connected with the agreed decommissioning plan as outlined at Sections 5 and 6 above, and within the approved cost estimates discussed at Section 7. This will ensure that the decommissioning fund does not become a tax deferral vehicle. The schedule discussed should outline the dates from contributions commence, the amount of each contribution and the currency in which contributions should be made.

- The structure and management of the fund itself. There are a range of options for this, discussed further below. However, the structure set up should meet some specified principles, e.g.:
 - the fund or an account must be established for the specific purpose of providing for the future payment decommissioning or remediation costs
 - there should be appropriate oversight including from the relevant sector ministry
 - there should be independent oversight outside the government or the industry, e.g. a retired banker, industry experts, etc.
 - the requirement to establish the fund should be provided for under the relevant mining or petroleum right
 - There should be provision for separate holding of the funds in trust, the appointment of investment managers and guidelines for prudent investment of funds held.

The fund may be organized in one of different ways:

1. For countries with a common law background, the trust legislation may be used to create an independent trust on a per project basis.
2. A trust account may be opened at a reputable bank which is under the control of the managers of the fund.
3. A special purpose company may be created as a condition of the extractive sector concession, governed by the principles outlined above.
4. An Environmental Protection Fund (as is the case in Zambia) or similar government fund can be created for decommissioning purposes.

There are important policy trade-offs in each one of these choices. Option 1 creates a very neutral and legally sound structure, but restricts the degree of flexibility; it can leave the trustees of the fund with a challenge when there are insufficient funds due to underestimation of costs. Option 2 is more flexible, but carries less legal certainty that the funds will be used for their stated purpose. Option 3 has a greater level of flexibility, and would enable the operator to be more directly involved; it however runs the risk that oversight may not be as strong. Option 4 runs the risk that the government may end up with the residual liability on decommissioning costs if such costs are underestimated.

8.6.3 Tax treatment of the funds

As a general principle, any income earned by the fund on investment of contributions should be treated as exempt income. This is on the basis that the purpose of the fund is to provide for decommissioning, and any increase in its overall balance should be intended for the same purpose.

Any amounts returned by the fund to the operator should be included in the income of the operator in the year it is received. This would include amounts received after decommissioning has taken place, and the funds held in the trust exceeded the actual costs.

8.7 Provisions

An alternative way to give tax relief for decommissioning costs is on an accruals basis, based on a tax deductible provision made in the annual accounts for decommissioning costs. This would be based very

much on the same principles as the other options, i.e. the decommissioning plan and the associated costs would have to be estimated and agreed with the relevant sector ministry in advance. Further, it would be necessary to specifically allow such a deductible provision in the taxation law of the country, as typically such provisions are not tax deductible. This rule is established in the Netherlands.

It will be necessary to create detailed rules on how the provision should be calculated and how much is allowed to be provided for each year. The operator may also be given a choice of different methods of making the provision, e.g. provide for the estimated cost over the life of the field, or based on each unit of product (i.e. a certain fixed amount is provided for against each ton of ore or barrel of oil produced). The government could also determine a specific provision schedule as part of the negotiations with the operator in relation to the concession.

It will also be necessary to take into account the tax treatment of foreign exchange losses and gains relevant to the accumulated provision made. Typically the deductions will be allowed in the currency in which the operator submits the accounts, which in most cases will be in the national currency. However, the actual decommissioning costs will typically have to be defrayed in hard currency. In making a final adjustment of the provision, it will be necessary to consider adjustments to be made for any currency movements. This rule would also then need to be added to the tax law of the country.

The provision method is probably the most flexible approach to the issue, and enables the operator to most efficiently deploy its capital. It may be argued that without the obligation of an actual cash outlay, tax-deductible provisioning can increase the expected rate of return from the project. It thus results in greater profits compared to a requirement to establish a decommissioning fund, and thus yields more in tax revenue to the state.

On the other hand, policymakers should be conscious that an unfunded provision can be open to abuse as a tax deferral device. Policymakers opting for this path should therefore be conscious of the need for appropriate controls and monitoring processes to ensure that excessive amounts are not being provided for. Further, it may be prudent to ensure that while a provision is being made, there is some corporate backing provided by the operator, in the form of one or more financial guarantees discussed at Section 8.4 above that the operator will perform its obligations on decommissioning.

Finally, it will also be necessary to devise rules to deal with excess or inadequate provisions made. Where excess sums have been provided for, there should be explicit provision in the tax law to recapture the excess. A further consideration here is whether the recapture should be at the tax rate of the excess provision year(s) or the year in which recapture takes place, and whether interest should be charged. Again, policymakers will have to consider the trade-offs in view of their need to attract additional investment to the extractive sector, their revenue goals and need to have a simple and clear decommissioning regime.

8.8 Special considerations for the petroleum sector

The deductible share differs from country to country, and among Production Sharing Agreements (most relevant for the oil and gas industry).

Deduction may not be claimed before the decommissioning work takes place.

Allocation to cover future removal costs is often not deductible.

Common tax relief in the oil and gas industry.

8.9 Special considerations for the mining sector

International accounting practices for restoration and rehabilitation costs in the mining industry vary from no recognition of a liability to full recognition. There is no specific International Accounting Standard dealing with the costs of closing a mine, but this issue, and the recognition of provisions in general, is being addressed by International Exposure Draft E59 - Provisions, Contingent Liabilities and Contingent Assets and a number of very similar national exposure drafts.

According to PricewaterhouseCoopers the most commonly used methods in the mining industry are:

- Expense as incurred
- Incremental method

In the mining sector, a key element in achieving comprehensive mine closure is to have in place adequate financial resources available to the mine, or the government, on closure to ensure that it can be carried out successfully. Financial instruments are particularly important in the developing countries where, quite often, there is a lack of legal framework addressing these issues.

According to mining experts approximately 30 per cent of the developing countries studied have included provisions for bonding. The tax implications of the provision systems in the mining industry in developing countries, needs to be further investigated.

9 Applied Tax Treatment Issues in Decommissioning

9.1 Accounting for costs

In accounting for decommissioning costs, it will be necessary to consider the general rules for accounting for costs. It is of course logical that the approach taken by the country in handling project-related costs, e.g. in a cost sharing contract, be followed for the sake of consistency. Further, policymakers should also consider whether decommissioning costs should be deductible on an entity or a project basis, especially where a deductible provision solution is opted for, or in cases where the overall natural resource extraction regime is based on ring-fencing of reserves.

As mentioned above, the accounting currency for decommissioning costs may be a specific challenge, as they will typically be in hard currency, while the accounting currency will usually be in the national currency of the project country. This will not be a significant issue where deduction is available and is made on an ongoing basis, or even in the use of funded mechanisms, especially if the fund is managed in hard currency. However, there may be a significant mismatch where an accrual-based provision is made, and policymakers will have to decide, in cases where the actual cost in hard currency exceeds the provision made, whether to allow the excess relief in the year of disbursement or over the life of the project. The same consideration should then apply to all recapture of excess provision made.

It is recommended that any forex gains and losses on disbursements from a fund set up under a funded deduction mechanism be explicitly kept out of the capital gains tax regime. Any such gains and losses will be reflected in the net balance of the fund, which would be subject to the recapture provisions in cases of excess deduction.

9.2 Allowability of costs

9.2.1 General principles

In general, allowability will follow the tax policy approach chosen from the alternatives presented at 8.2. However, there needs to be a provision for allowance for excess costs over the planned and agreed costs if such costs occur, and for recapture of excess provision allowed.

9.2.2 Complex cases

The grant of tax deductibility on decommissioning, and of recapture of excess provisions in accrual provision regimes, will be particularly complex in the case of single block/field operators. In this situation, the operator will have no operating income in the country and will have little incentive to fulfil its obligations, beyond general reputation questions. It may be useful to consider a mix of instruments as a solution, e.g. the availability of loss carry backs for such operators subject to approval by the tax authority.

Another possible area of complexity will be deductibility of costs for decommissioning of ancillary and supplementary equipment that is not the operator's property, e.g. those owned by subcontractors or partners. It is necessary to take a flexible approach to these issues and leave scope to permit deductibility on a case by case basis, as long as the expense is actually incurred.

A further challenge may come from costs incurred that are strictly speaking not for decommissioning, e.g. for repurposing of fields which is not uncommon for the mining sector. It is possible that in some cases good planning can lead to continued use of an extractive sector project for some completely different purpose, e.g. the conversion of open pit mines into a lake with fisheries or tourism potential. The technical argument here will be whether such expenditure is of a revenue nature (i.e. for decommissioning) or a capital cost (development of a new facility), especially if the same owner, or a related company, continues to operate the facility. It is recommended that a flexible approach be taken, and the tax treatment decided in a manner that balances the need to encourage more efficient use of sites with the need to raise revenue.

9.2.3 Multiple operator cases/combined fields

Another complex area can be that of multiple operators who are partners in a single field. One operator may have other income from the jurisdiction while the other operator may only have one project. The first operator may wish to see ongoing deduction of decommissioning costs, while the latter would probably prefer an accrued provision. Again, a flexible approach, based on the accurate estimation of costs, and controls to ensure that both operators will perform their obligations, can enable policymakers to create a win-win situation that will allow both operators to make the most efficient use of their resources.

A related challenge can be multiple operators who manage contiguous fields, but utilize common facilities such as pipelines. The problem can be particularly aggravated if the fields in question have different expected lives, as the operator in the field with the lower expected life have less time to provide for its share of decommissioning costs of common facilities, and more importantly, will probably be absent from the country when the pipeline needs to be decommissioned. In such cases, the decommissioning plan needs to be agreed with both (or multiple) parties, respective shares allocated, and a funding mechanism with oversight from both parties is probably the best solution.

9.3 VAT/GST and services tax issues around decommissioning

Value added taxes (VAT) and goods and services tax (GST) and other indirect taxes on services will also impact decommissioning. The biggest challenge will be that while the contractors providing the decommissioning services should undoubtedly charge the tax on the services they provide, the operator may not (e.g. single block/project operators) have any output tax against which it can take a credit. While it might be tempting to provide a specific exemption for decommissioning services, this is not recommended, as this is likely to give rise to ongoing classification disputes. E.g. an oilfield services firm that provides welding and inspection services may be working on an assembly of a pipeline in the country concerned, and also on a decommissioning project. It will be very difficult to keep these activities separate and charge tax on the former and exempt the latter. A more detailed discussion of VAT in decommissioning can be found in the Guidance Note on VAT.

9.4 International tax issues

9.4.1 Anti-avoidance/safeguard provisions

As most operators in the industry in developing countries will be foreign companies, some attention must be given to the way in which anti-avoidance rules and treaty safeguards can support the tax rules on decommissioning. Care must be taken to ensure that any liability for deductions taken on the basis of an accrual provision regime, or rules regarding fund shortfalls or excess provision recapture can be enforced through the double taxation treaty network of the host country.

Policymakers considering the grant of an accrual provisions regime may wish to consider an anti-avoidance clause in the case of use of offshore companies for extractive industry arrangements. In other words, where the operator is using a company based in a low tax jurisdiction for the concession, accrual provisions may not be made, and only a funded mechanism will be applied.

9.4.2 Tax treatment issues in joint development areas and contiguous fields

The tax regimes for Joint Operating Areas and contiguous fields need to be considered by the jurisdictions concerned. There can be a situation where a single field falls in two jurisdictions, which are exploited by a single operator, or two or more operators exploit contiguous offshore fields that fall within two separate jurisdictions, but share facilities. There is a need to design a holistic decommissioning regime wherever possible within the auspices of the JOA/JDA authority where applicable, or by consultation between the parties, in line with the recommendations of this Guidance Note, and then proceed to estimation of plans and costs. The partner jurisdictions should then consider a consultation between their tax authorities to deal with the tax consequences that arise for the costs that are allocable to their jurisdiction.

9.4.3 Interaction with PE provisions

Two separate permanent establishment issues arise in the case of decommissioning costs. The first are the PE issues for the operator while the decommissioning process is underway. Does a PE exist if the project, especially if it is an offshore field or mine that is within the purview of Art. 5 of the UN Model by reason of the definition at Art. 5(2)(f) (or the specific language adopted by a bilateral treaty) is already non-productive? The Commentary to the UN Model, at Para 5, discusses “place of extraction of natural resources”; an extension can perhaps be made that a former place of extraction still falls within that definition.

The second question is around PE issues for subcontractors undertaking decommissioning work. Here, it is recommended that the normal tests under Art. 5(3) of the UN Model (or the specific language adopted by a bilateral treaty) should apply.

9.5 Tax treatment of contractors undertaking decommissioning work

The overall tax treatment of contractors performing decommissioning work should be on the same basis as those providing any other form of technical services in the country. The extension of deemed PE treatment to offshore projects under decommissioning, as proposed in 9.4.3. above should resolve any

issues regarding work done on offshore platforms. Such subcontractors should be subject to the normal regime for withholding taxes and VAT.

10 Mechanisms to Resolve Issues/ Dispute Resolution

1. Consultation/hearing process
2. Independent 3rd party expert
3. International judge (JDA/Border line disputes)

11 Annex: Taxation of Environmental and Restoration Costs in Zambia

1.1 Introduction

This write up provides insight on the tax treatment of Environmental Restoration and Rehabilitation costs in Zambia. It also provides a historical background to the current legislation.

1.2 Type of mining in Zambia

The mining industry is an economic and social backbone of Zambia. The major minerals produced include copper, cobalt, nickel, manganese, coal, emeralds, amethyst, beryl, lime stone, talc and uranium (though uranium is currently just been stock piled). The major by-products from copper extraction are gold, platinum, palladium, selenium and silver.

The main mining methods include open pit, underground, solvent extraction and electro wining.

1.3 Case study – environment restoration costs

Mining companies in Zambia like in most countries are required under the Mines and Minerals Development Act to undertake environmental impact assessment studies and make binding commitments through an environmental management plan to conserve and protect natural resources during and after cessation of mining activities.

Whilst this legislation had always been in place under the Mines and Minerals Act since 1995, Zambia had until April 2006 no specific provisions in the Income Tax Act (ITA) that dealt with the environmental restoration and rehabilitation costs. Nonetheless the ITA had two general provisions that dealt with Environmental restoration expenses, namely:

1- General Deduction Provision

(i) Section 29(1)(a) of the ITA is the general deduction provision and provides that:

“in ascertaining business gains or profits in any charge year, there shall be deducted the losses and expenditure, other than of a capital nature incurred in that year wholly and exclusively for the purposes of the business;”

The above quoted provision requires that the environmental restoration and rehabilitation costs should:

- (a) not be of a capital nature; and
- b) be incurred in the relevant year to qualify for tax deduction.

Whilst the decision to determine whether the outgoing is revenue or capital in nature is a debatable one, environmental restoration and rehabilitation costs are of a capital nature as decided by tax cases and as such this provision effectively barred deduction of Environmental expenses. Accordingly, then one had to look at the other leg of deductions in the ITA applicable to mining companies, which deals with capital expenditure deductions.

2- Capital Expenditure Deduction

Section 33(b) of the ITA is the principal provision for capital expenditure deductions incurred by Mining Companies. This Section provides that:

“Capital allowances are deducted in ascertaining the gains or profit of a business and the emoluments of any employment or office for each charge year –

.....(b) for capital expenditure in relation to mining operations, according to the provisions of Parts I to VI inclusive of the Fifth Schedule.”

Part VI of the Fifth Schedule (Paragraph 19) defines qualifying capital expenditure as *“expenditure, in relation to mining or prospecting operations - on buildings, works, railway lines or equipment...”*.

The ITA does not have a definition of “works” and thus taking the ordinary meaning, the word works includes environmental restoration and rehabilitation works.

Whilst the above definition of capital expenditure was sufficient, the complication in allowing deductions on environmental costs came in through Paragraph 22(1) of the Fifth Schedule which provided that *“a deduction shall be allowed in determining the gains or profits from carrying on of mining operations by any person in a charge year in respect of the capital expenditure **incurred by the person on a mine which is in regular production in the charge year.**”*

Therefore, from the foregoing, environmental restoration and rehabilitation costs were deductible as capital expenditure provided **(1) the expenditure had been incurred;** and **(2) it had been incurred on a mine which was in regular production.**

These two conditions were at the heart of concerns from the mining sector as it was not practical to commence environmental restoration and rehabilitation works on a mine that was in regular production. It was therefore contended that the legislation as it stood prior to the Tax amendment of April 2006, effectively barred the right to deduct environmental restoration and rehabilitation expenditure.

Current Tax Treatment (Tax Deduction Provisions after 1st April 2006)

To address the undesirable effects of the Tax Law, amendments were made effective April 2006. The following is the current law:

A deduction is allowed in ascertaining, the gains or profits of a person involved in mining operations in respect of actual costs incurred by way of restoration and rehabilitation works or amounts paid into the Environmental Protection Fund, (this fund is administered by the Ministry of Mines and Minerals Development). Only actual costs are deductible and therefore provisions are not allowable in determining taxable profits.

Additionally amounts refunded from the Environmental Protection Fund to any person carrying on mining operations are recognised as income in the year the refund is made and hence qualify to be taxed.

The extracts of relevant provisions under the Income Tax Act are given below.

First Schedule to the Income Tax Act (Further Classification of Income)

Paragraph 9

Amounts refunded to any person carrying on mining operations pursuant to paragraph (a) of subsection 3 of section one hundred and twenty two of the Mines and Minerals Act shall be deemed to be income in the year that the refund is made.

Fifth Schedule to the Income Tax Act (Mining expenditure deductions)

Paragraph 22(4)

A deduction shall be allowed in ascertaining gains or profits of a person involved in mining operations in respect of actual costs incurred by way of restoration and rehabilitation works or amounts paid into the Environmental Protection Fund pursuant to section one hundred and twenty-two of the Mines and Minerals Development Act, 2008.