

ATTACHMENT D: TAXATION GUIDELINES FOR WORLDWIDE DECOMMISSIONING¹

November 14, 2014

OVERVIEW

1. Executive Summary

1.1 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. When production comes to an end, key drivers affecting decommissioning of mines and petroleum facilities are politics, public concern and reputation, legal requirements, cost and economics, taxation framework, technical feasibility, health, risk and safety, environmental impact and other users of the land and the sea.

1.2 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.

1.3 The activities related to the extractive industries in the cessation phase usually includes cost estimates and associated provisioning for the facilities mining and oil companies operates. There is a need to explore and understand the tax implication of decommissioning liability issues, and provision instruments used in the industries. 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.

2. Purpose

2.1 This note 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. Broader decommissioning issues are addressed only to properly contextualize the taxation issues.

3. Status

3.1 This note is for guidance only. It is intended to address the issues in relatively brief form and to help build awareness of them, as well as to help put those faced with these issues in a better position to make policy and administration decisions in relation to them.

¹ This draft is for UN Extractive Subcommittee discussion only, and should not necessarily be taken as representing UN Tax Committee or UN Secretariat views.

4. Terms Used

CGT = capital gains tax used generally in this note to include taxation of a capital gain either through a separate specific capital gains tax regime or through the general income tax system

ESHS = Environment, sustainability, health and security

IAS = International Accounting Standards

OECD Model = *OECD Model Tax Convention on Income and on Capital (2010)*²

UN Model = *United Nations Model Double Taxation Convention between Developed and Developing Countries (2011)*³

5. The Issues

(a) **What are the Issues Involved?**

5.1 The extractive industries are an important component of global industry for the creation of nation wealth. The two main extractive industries are mining industry and the petroleum industry. The facilities used to extract raw materials in mining industry and oil and gas in the petroleum industry require large multi-year capital investments in infrastructure. As the mines and the oil and gas facilities become depleted the now redundant facilities require decommissioning and remediation. This is the final phase of the life cycle of these extensive facilities.

5.2 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-government organizations. Decommissioning is part of the life cycle of an offshore installation.

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

5.4 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.

5.5 Furthermore, many of these emerging legacies 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.

(b) **What are the Policy and Legal Aspects?**

5.6. 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 the lease agreement. Typical steps required to comply with the sector law and regulations and/or the closure, decommissioning and remediation terms in lease are:

² Available at http://www.keepeek.com/Digital-Asset-Management/oecd/taxation/model-tax-convention-on-income-and-on-capital-condensed-version-2010_mtc_cond-2010-en

³ Available at http://www.un.org/esa/ffd/documents/UN_Model_2011_Update.pdf

- 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

5.7 The key drivers affecting the decommissioning of the mines and petroleum facilities are:

- Politics, public concern and reputation
- Legal requirements
- Cost and economics
- Taxation framework
- Technical feasibility
- Health, risk and safety
- Environmental impact
- Other users of the land and the sea

5.8 The above list of key drivers is an example and is not ranked in order of importance, as the ranking of each facility in each country should be carried out on a case-by-case basis.

5.9 What makes decommissioning more difficult are the political and community impacts of the closure of major facilities in a community. 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.

5.10 Generally, the nature of traditional onshore and offshore upstream exploration and production (E&P) of 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 sectorial 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, obtaining of permits (permitting), project execution and dismantling, and removal of structures used during resource exploitation
- The 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 sign-off by the government
- Assessment of any future liability

5.11 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. These closure processes will result in a complex sustainability issue which is part of the natural life cycle of a mine or a petroleum field.

5.12 The planning for the closure process should begin during the early phases of the project life cycle, incorporating environmental concerns as well health and safety issues and the socio-economic needs of the nearby population. Governments hosting extractive industries will need to understand the environmental, social and economic issues associated with the closure or decommissioning of a mine or petroleum facility and treat them as part of the facilities life cycle.

(c) Politics, Public Concern and Reputation

5.13 As discussed above, the effects resulting from the 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.

5.14 It is advised that the key stakeholders ensure that the selection of the decommissioning/closure option is managed in a transparent way, with a fully developed public audit trail. The three major components that need to be managed are:

- National and local politics
- Public concerns
- Reputation

5.15 The development of a proper decommissioning and closure process includes guidance from stakeholder groups representing all national and local interests including representatives from the petroleum, mining and fishing industries, environmental non-government organizations, 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.

5.16 The objectives of a stakeholder policy development process usually are:

- To develop principles/guidelines to apply to the closure/decommissioning of existing facilities
- To develop principles/guidelines to apply to the design, operation and future closure/decommissioning of new facilities
- 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
- To provide industry with guidance as to what will be expected of them in respect of closure/decommissioning, with the aim of reducing risk and uncertainty
- To develop, to the extent possible, consensus between stakeholders
- To provide opportunity for public comment and involvement in the development of government policy
- Recognition of possible future liabilities and how they could be managed
- Etc.

(d) Legal Requirements- International Petroleum Requirements for Decommissioning

5.17 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 environment, safety, technical feasibility, cost etc. has forced an evolution in the law and regulations of decommissioning.

5.18 The optimal solution may not be total removal of 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 many UN Member States and have built in such flexibility.

- United Nations Convention on the Continental Shelf, 1958
- Third United Nations Convention on the Law of the Sea, 1982, UNCLOS III
- "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", 1989 (a.k.a. IMO Guidelines)
- "Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter ", 1972 (a.k.a. London Dumping Convention- LDC)
- "1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters" (a.k.a. London Protocol)

5.19 The international laws and regulations that are listed in the Annex [to be added] are supplemented by relevant national and state legislation. The national and state legislation can impact on the mine closure and decommissioning of petroleum facilities, under environmental, safety, waste management, socio-economic and tax and customs laws etc. Furthermore, due to the potential socio-economic impacts, the decommissioning of redundant oil and gas facilities and the closure of mines is becoming a local and regional issue.

5.20 The decommissioning of pipelines of the petroleum industry is not covered in international law and usually this issue is managed in national legislation. Similarly in the petroleum industry there is no guidance on the subsea equipment located on the seabed. But for both pipelines and subsea facilities there are two clear principals in international law (from Geneva 1958, UNCLOS 1982 and IMO 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

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

(e) Legal Requirements- International Mining Best Practices for Mine Closure

5.22 National mine closure policy may be affected by, for example, a national constitution that mandates a healthy environment for its citizens or by requirements of international treaties and agreements (United Nations Convention on the Law of the Sea, Basel Convention). At the national level, individual national sectorial policies and legislation (other than those for 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.

5.23 Many countries do not have provisions for mine closure in their mining laws. Few governments have actual mine closure legislation. Such mine closure legislation as exists primarily addresses reclamation and rehabilitation.

5.24 If the life cycle of a mine was fully considered prior to establishing the mine, then comprehensive mine closure and all that it entails would simply be part of any mining planning and design. But past history and present practices in many countries clearly demonstrates that this is not the case.

5.25 The countries that have enacted national mining closure law 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 for comprehensive mine closure. 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, 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.

5.26 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.

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

5.28 Many of the developing countries in Africa, Latin and South America and Asia, each with a long mining history of private sector mineral development, are characterized by having only:

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

5.29 However, a few developing countries, such as Bolivia, Mali, Namibia and Zambia have comprehensive policy and legislation that provides for comprehensive mine closure and for post-mining sustainable development. In many of the larger developing countries though, the mining sector has inadequate policies and legislation for comprehensive mine closure and for post-mining sustainable development.

5.30 In such countries this issue of post-closure sustainable development presents the greatest problems for government, as they often have inadequate and unproven financial instruments. One of the key financial instruments is a taxation system which facilitates this process.

5.31 In summary the sectional law and regulation provides the framework and guidance for the taxation in a country.

(f) Decommissioning and Remediation Costs

5.32 The 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 expressed in broad terms and rely on, when available, the more

detailed national and state law, regulation and guidelines.

5.33 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: At the end of the life of the petroleum field and mines the state and the other partners will have to provide funds for costs in excess of the accrued provisions.

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

5.35 In the International Accounting Standards (IAS 37), it is required in the annual accounts to provide provision for the liability for the decommissioning of redundant facilities and remediation.

(g) Taxation Framework and Provisions for Decommissioning

5.36 The taxation implications of the instruments addressing future decommissioning need to be explored and understood. Examples of the decommissioning instruments used in the Petroleum Industry listed below.

- Financial Security
 - Current cash flow/existing operations
 - Parent company guarantee
 - Bank guarantee
 - Letter of credit
 - Insurance guarantee
 - Decommissioning/removal fund
 - Ring-fencing of decommissioning funds

- Financial Obligations
 - Farm-out
 - Liability
 - Residual liability

- Provisions – allocation of funds
 - Unit of Production Method
 - Amortization over field life
 - Carry back against taxation
 - Grant system
 - Tax deductible on the fund and the growth of the fund

5.37 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 developing countries where, quite often, there is a lack of legal framework addressing these issues.

5.38 According to mining experts approximately 30 per cent of developing countries studied have included provisions for surety bonds to ensure adequate provisioning for decommissioning. The tax implications of the provision systems in mining industry in the developing countries needs to be investigated by the nominated experts for the mining sector in this UN tax group.

(h) **Stakeholders**

5.39 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.

5.40 A list of stakeholders would include:

- Government, authorities and politicians
 - National (ministries and agencies)
 - Regional and district
 - Local (port authorities, community, etc.)
- Commercial Interest Groups
 - Decommissioning supply industry
 - Local industry
 - Investors
 - Unions and employer organizations
- NGO Groups
 - Environmental
 - Marine life
- Other User of the Sea
 - Shipping and navigation
 - Fishing industry
 - Tourist industry
 - Navy
- Media
- Universities and research organizations

(i) **Environmental Impact**

5.41 Once closure and decommissioning strategies have been decided upon, it will be necessary to develop an Environmental Impact Assessment for the relevant options, ranking the options and communicating the outcome to various stakeholders.

5.41 No mine closure or decommissioning study would be complete without proper impact assessment. The purpose of an impact assessment is to clarify the effects of the measures that may have significant consequences for the environment, natural resources, and society. The impact assessment 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.

5.42 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