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Update of the Handbook on Selected Issues for Taxation of the Extractive Industries by Developing Countries Chapter XX: Issues and Best Practices in Auditing Oil, Gas and Mining Activities

Note by the Secretariat

Summary

The purpose of this chapter is to provide developing countries with an overview of the issues that are encountered in relation to tax audits and to provide insights on generally acceptable practices that can be used by officials in developing countries when auditing the extractive sector. The chapter provides practical illustrations employed by countries in dealing with issues arising from the audit of the extractive industry.

The chapter discusses the entire audit process, preparation, planning, execution and finalization and discusses the intricacies of the extractive sector audits. The issues discussed are not intended to be exhaustive and will require detailed and extensive analysis in practice given the specific nature of the extractive industry.

At the 21st session, the Subcommittee informed the Committee of its intention to work on Trade Mispricing as a part of the Auditing chapter as time was running out to study trade mispricing in depth and make it a new chapter. The Committee approved the proposal.

The last section is focuses on trade mispricing between non-related parties, explains how it generally happen and what might be the motives. Some general solutions are also proposed but such a critical issue will certainly continue to be a subject of concern for policy makers.

The paper is submitted to the Committee for DISCUSSION and APPROVAL

CHAPTER XX: ISSUES AND BEST PRACTICES IN THE AUDIT OF OIL, GAS AND MINING ACTIVITIES

Table of Contents

<u>1.</u>	Introduction	
<u>2.</u>	Tax Administration Arrangements	3
<u>3.</u>	Industry Knowledge of the Extractive Industry in th	e Context of Audits11
<u>4.</u>	Tax Audit Process and Issues	14
<u>5.</u>	Role of Joint Venture Partners	
6.	Domestic Multilateral Tax Audit Options	
<u>7.</u>	Audit Tools	
<u>8.</u>	A lternative Compliance Approaches	
<u>9.</u>	Capacity Building Possibilities	24
<u>10.</u>	Trade Mispricing	24
Referen	nces: Erro	r! Bookmark not defined.

1. Introduction¹

- 1. The aim of this chapter is to provide developing countries with an overview of the issues that are typically encountered during planning and execution of tax audits in the extractive industry. The chapter also provides insights on administrative practices that can be used by tax officials in countries when auditing the extractive sector.
- 2. The issues discussed in this chapter are at a high level and are not intended to be exhaustive and will require detailed and extensive analysis in practice given the complex nature of the extractive industry.
- Although the Chapter predominately focusses on domestic audit practices, Section
 [6] describes bilateral and multilateral audit approaches in recognition of the growing international use of joint audits and simultaneous audits. Section 6 further describes audit capacity building programs, such as Tax Inspectors Without Borders (TIWB)², that is available for developing countries.
- 4. Determining the nature of an audit from the outset is important (general vs specific audit scope) as it informs the planning choices and extent of involvement from non-tax office stakeholders such as technical experts or representatives from other Governmental agencies. This paper discusses the typical audit approach in such circumstances.
- 5. For completeness, Section 9 of this Chapter briefly discusses other compliance approaches that can be applied in parallel to audits, which could in the appropriate tax environment, improve overall taxpayer compliance.

2. Tax Administration - Institutional & Organisation Structures

6. Traditionally, many countries operated a decentralized model due to the physical proximity requirements that were needed to carry out audits. However, many tax administrations are now moving towards a centralized model to better implement a shift in compliance strategies towards an integrated risk assessment model³.

¹ The publishers would like to thank Dr John Abrahamson and colleagues at the Australian Tax Office for their input to this chapter

² TIWB is a joint initiative of the UNDP and OECD, designed to support developing countries in building tax audit capacity

³ Forum on Tax Administration Information Note – Working Smarter in Structuring the Administration in

Compliance, and through Legislation, Organisation for Economic Co-operation and Development, pp.15

- Functional structures within tax administrations can vary from country to country. Two types of functional structures are discussed below with each having its own merits:
 - Hub and spoke model: is a centralized operational model where communication and information is passed from a functional line team (such as auditors) to a centralized "hub" for response coordination and intelligence gathering. The hub can be a formalized through reporting lines or be through internal procedural directives. In practice, the model is adaptive and can be applied in many different contexts such as a main office in a regional capital with several provincial offices in locations across the region. Another application of this model is where tax technical specialists are grouped together (the 'hub') and provide expert advice to generalist tax officials (the 'spoke').
 - Matrix model: is an operational management approach where a tax official may have more than one management reporting relationship. For example, a tax official can be a member of a large business audit team and also be recruited into a special project or taskforce team to deliver on unique assignment. This approach allows officers of differing expertise and skill sets to be grouped together on a project by project basis depending on the intricacies of the audit work to be undertaken.
- 8. For specialized industries such as the extractive sector, a dedicated sector specific compliance team is beneficial due to the complexities associated with the interaction between sector-specific tax laws and the commercial operations of extractive companies. For example, it is not uncommon for extractive audits to consider how Petroleum Agreements, Development Investment) Agreements and other specific contracts may interact. These agreements may contain specific tax rules or may stabilize tax laws at a particular date which may take precedence over domestic tax laws and regulations. It is therefore necessary for tax auditors to consider at the outset of any audit, the relevant tax laws and regulations which are applicable.
- 9. A dedicated extractives tax unit enables tax officers develop specific expertise and a thorough understanding of the extractives sector, thereby developing an exhaustive understanding of the interaction of tax and non-tax levies applicable to the sector, including: commercial arrangements or any peculiarities associated with specific commodities which are extracted in the specific jurisdiction: for example, the tax provisions associated to gold mining may differ from other minerals such as copper or silver. Officials assigned to an extractives unit acquire skills to easily manage such differences and assess the deductibility or otherwise of costs reported

as incurred (a non-exhaustive summary of some of the typical costs incurred is shown in table³ herein).

- 10. To manage resourcing and ensure a consistent approach to technical issues the dedicated team would typically be able to call on subject matter experts outside the audit team and may be within the tax authority as required or other Governmental agencies (e.g. experts in financing arrangements, transfer pricing, technical accounting etc.). Taking confidentiality and management of sensitive information into account, this allows subject matter experts to support multiple teams and multiple audits.
- 11. The benefits of a dedicated team to address the unique features of the extractives industry cannot be understated. By way of an example, Table 1 below sets out, in relation to fiscal depreciation (capital allowances), potential differences between general tax provisions, sector-specific tax rules and fiscal terms in project specific agreements. A dedicated team which is focused on mining and/or oil and gas could help bridge the gap in application of relevant tax laws and regulations.

Country	Ghana	Zambia	South Africa
General tax rules	Tax depreciation generally on a reducing balance basis with specific rates highlighted in	Tax depreciation generally on straight line basis with specific rates highlighted	Tax depreciation (wear and tear allowance) for items not of a permanent nature, on a straight-line basis, with specific rates set out in a South African Revenue Service
Oil and Gas	the tax law 5-year straight line basis	in tax law Oil and gas follows general tax rules as Zambia is not an oil producing country	(SARS) Interpretation Note. 100% deduction irrespective of whether the company is in a taxable income or assessed loss situation. An additional deduction is granted for expenditure of a capital nature equal to 100% for exploration and 50% for post-exploration (but preliminary to refining).
Mining	5-year straight line basis	100% deduction for exploration expenditure; 5- year straight line	100% deduction for explorationexpenditure subject to the discretionof the SARS Commissioner.Mining capital expenditure is fullydeductible but limited to taxable

Table 1: Country examples of general vs specific tax rules relating to fiscal depreciation⁴

⁴ For further detailed discussion on the overlay of the various taxes, regulations and agreements, reference can be made to Chapters [XX] and [XX] respectively on Tax Sharing Arrangements as well as Production Sharing Contracts.

E/C.18/2021/CRP.12

		basis for mining operations	income from a mining source. The capital expenditure deduction cannot create or increase an assessed tax loss. The amount of unredeemed capital expenditure is carried forward to the next tax year, when it is deemed to be capital expenditure incurred in that year.
Agreements	Depending on the type of agreement, there are different bases of tax depreciation which may supersede local laws.	None in place	Not applicable

The Right Staff Mix

- 12. Many tax administrations have a dedicated team dealing with the extractive industry with a mixture of tax officials who have competencies and qualifications, including but not limited to accounting, economics, law, mining engineering and geological backgrounds. Specifically, officials with industry relevant and applicable professional or academic backgrounds which can provide a strong basis for understanding industry specific terms that those who operate day to day may take for granted but may seem foreign to new entrants or those who are not familiar with the industry. This approach helps set up a platform for constructive dialogue, continuous education and improves communication between the taxpayers and tax administrators. Another benefit of this approach is ease of identification of potential risk issues and areas to place focus upon.
- 13. The increasing digitalization of the tax filing systems and use of data in increasing size and volume has also increased the relevance of technology and data analysis skills as complementary competencies to audit planning and implementation.
- 14. Officials with long standing industry experience often bring invaluable tax memory in terms of understanding the rationale and background for changes in laws and regulations as well as in tax regimes as set out in specific agreements. Their experience adds value in terms of the historical basis of steps taken which have evolved into current application and practice. This is especially beneficial in tax administrations that have limited history in dealing with the sector.

15. Finally, managing long term staff retention and movement is also an important consideration, with tax administrations needing to balance benefits that come with staff stability against an over reliance on the experience and knowledge of a small number of tax officials. Therefore, it is critical that tax administrations have processes in place to ensure the long-term preservation of corporate memory and knowledge sharing practices are established as priority. Reliance may also be placed on robust information depositories (such as secure electronic databases) for preservation and retention of historical information.

Governmental agency cross-collaboration

- 16. Extractive industry participants are often regulated/scrutinized by different government agencies, ranging from and including:
 - An industry regulator (overseeing the issue of permits, compliance with laws and reporting)
 - Tax administrator (collection of tax and administration of tax rules)
 - Ministry of Finance (tax policy development and implementation)
 - National Oil or Mining Company (who may exercise oversight and not operational responsibilities. In some jurisdictions, National Oil or National Mining Companies are have a stake in operational activities and do not play an oversight role).
 - The oversight role may encompass administration of joint sharing arrangements, , administration and distribution of royalties and other non-tax levies.
 - Ministry of Mineral Resources/Lands/Mines/Petroleum (licensing and regulation)
 - In some jurisdictions, agencies are in place that are dedicated to specific aspects of extractive operations to the extent that such operations are considered to be public expenditure.
 - In others, the Supreme Audit Institution may have oversight of cost recovery where it is considered public expenditure.
 - Any other Ministries or offices who may have oversight of other relevant areas specific to extractives.
- 17. Within the above main agencies are several subsets which are also in charge of (or have oversight of) the same industry participants. These include for example: forestry resources, water resources, fisheries, sanitation, shipping, customs and excise. In many jurisdictions, these agencies operate within the boundaries of their establishing objectives and specific governing laws and there is limited sharing of information to avoid breaching strict privacy and taxpayer confidentiality laws.

Box 1: An example of inter-agency extractive industry taskforces in Sierra Leone

InterAgency Collaboration in Sierra Leone⁵

Coordination of mining tax administration and tax policy design improved considerably following the establishment of the Extractive Industries Revenue Taskforce (EIRT) in Sierra Leone. The EIRT is hosted by the division for Tax Revenue Policy at the Ministry of Finance and Economic Development and includes the Ministry of Finance, National Revenue Authority, National Minerals Agency, Petroleum Directorate and the Extractive Industries Transparency Initiative (EITI) secretariat.

The EIRT began informally to troubleshoot various issues relating to EITI reconciliation reports. Members of the group found it to be so useful in terms of sharing information and solving problems that they decided to formalize it and extend its mandate beyond EITI challenges. One achievement of the EIRT was to reduce the export duty on gold to levels more comparable to the other Mano River Union (MRU) countries (Guinea, Liberia, Ivory Coast), which is seen to be the main factor in recent decreases in smuggling and increases in official gold exports.

- 18. In some jurisdictions, there could be an overlap in information requests to industry participants by each of the oversight agencies, albeit in different forms and using different templates. Where it is legally permissible, cross-agency sharing of previously requested information could improve compliance efficiencies for both the tax administration and taxpayer alike, and is therefore encouraged.
- 19. In some jurisdictions such as Zambia, this potential overlap has been bridged by the establishment of a central information collation portal whereby taxpayers upload information in pre-determined templates, following which relevant Government stakeholders have access to this portal to download information relevant to their remit. Such an approach could reduce any duplication of information requests or overlap of issues.
- 20. Apart from the advantage of reducing the duplication of audits conducted on the extractive industry by each oversight agency collecting the same information, such a collaborative approach to information gathering and planning would be of assistance to building and widening the tax office's internal knowledge capabilities, whilst building industry expertise and leveraging from knowledge in other departments.

⁵ Natural Resource Governance Institute, Preventing Tax Base Erosion in Africa: a regional study of transfer pricing challenges in the mining sector https://resourcegovernance.org/sites/default/files/documents/nrgi_transfer-pricing-study.pdf

21. Table 2 below sets out an overview of Zambia's central information collation portal, known as the mineral value chain monitoring system.

E/C.18/2021/CRP.13_____

Table 2 overview of Zambia's mineral value chain monitoring system.

	Ν	Mineral Value Chain Monit	oring System – Case of	f Zambia
An Integrated and transparent multi-stakeholder electronic mineral monitoring framework providing consistent data relevant to various government departments and agencies. Monitors the mineral value chain from production to export.				
Agencies –	System Modules	Input	Output	Benefits
Tax administration; Mining Department; National Statistics office; Company and business registration office; Bureau of standards; Roads department; Road Transport and Safety department	 Mineral Production Export Permit 	 Monthly quantity of minerals produced (own and third party) Monthly quantities of minerals purchased from third parties Monthly quantity of minerals sold Government Mineral Laboratory Assay Reports Mine Gate and inland weigh bridge quantities 	 Production reports specific mineral type Sold production quantities Export permits 	 Detection of any mineral misclassification by exporters Improved stakeholder collaboration Source of third party information for cross checking completeness of information in relation to tax audit reviews Realtime access to mineral production (including sold quantities) reports Ease of crosschecking information submitted to Customs Authorities and that submitted in relation to application for export permits Acts as deterrence to under reporting/declaration for tax purposes. Quicker compilation of national statistics

3. Industry Knowledge of the Extractive Industry in the Context of Audits

- 1. The extractive industry has unique technical and commercial factors and developing specific knowledge is highly beneficial in an audit environment. Understanding the commercial drivers and operations of the business, including each stage of the extractives value chain⁶ (exploration, development, production, transport, marketing, selling, and decommissioning/rehabilitation) can help auditors identify accounting anomalies and separate true commercial drivers from tax driven schemes.
- 2. The extractive industry is particularly sensitive to capital and operating costs these are the main variables that are largely within the control of the extractive company. Extractive sales are largely dictated in a price environment that is driven by regional or global prices and outside of the control of the extractive company. In this regard, most extractive companies would be considered to be 'price takers'. For these reasons, one of the key commercial imperatives for an extractive company is to be a low cost producer.
- 3. Each stage of the extractive process is unique in approach and cost base as well as in its interaction with tax rules. Whilst a basic technical appreciation would be important, understanding the nature and purpose of each stage from a business strategy perspective would also help provide appreciation of the type of commercial costs that can be expected and costs which may otherwise be characterized as uncommercial or tax driven⁷. This may involve gaining an appreciation of:
- a. Supply chain management and the processes and costs involved in sourcing raw materials, equipment and other inputs.
- b. The processes involved in refining the mineral and ultimately selling to end customers and where to obtain contemporaneous market benchmarks on those costs 8
- c. How the group funds and manages its financing risk can be informative as to how it would be expected to fund and mitigate financial exposures at a subsidiary level, particularly for transfer pricing risks associated with financing arrangements⁹
- d. Familiarity with how extractive material is priced would be advantageous as minerals and hydrocarbons are often traded on public commodity exchanges¹⁰. A

⁶ Refer to the introduction chapter in this manual for an overview of typical extractive industry processes

⁷ For example, see Hedging arrangement example in Chapter 5 of the UN Transfer Pricing Handbook

⁸ For example, treatment and refining costs for copper concentrate follow industry benchmarks and exact rates can be found in commercial databases.

⁹ The introductory chapter to this manual, Chapter [XX] on financing transactions, as well as Chapter 5 of the United Nations Practical Manual on Transfer Pricing for Developing Countries contain detailed supporting summaries.

¹⁰ These include: the Intercontinental Exchange or the Chicago Mercantile Exchange for oil and gas as well as minerals, including gold, silver, copper, and aluminum.

good understanding of the functioning of these markets and the quotation methods is very useful for auditing intra-group prices within multinational enterprises.

4. Industry or subject matter experts in other units within the tax authority could be good sources of reference or background information. In addition, government agencies and other non-governmental agencies provide useful reference points in order to have a balanced and targeted approach to understanding the extractive industry.

The site visit and its associated relevance or value add to an audit

- 5. Undertaking regular site or field information visits are recommended as a means of engaging with the industry and promoting dialogue with field operations. In addition to building an informed awareness of the industry, such site visits, particularly for large and complex taxpayers, enable tax practitioners to contextualize the scale and size of operations. Further site visits could be useful in instances of change in business strategy or approach (such as investment in, or installation of new equipment), to dialogue and understand the associated tax issues.
- 6. In addition to visiting operations, meeting with staff in corporate office locations is also useful and relevant.
- 7. Such visits may be undertaken on an information only basis (e.g. to understand any updates or changes in business circumstances), relationship building basis or as part of formal tax audits where operational costs and activities are able to be verified.
- a. When visits are undertaken in the context of information gathering and learning, and not in a formal audit setting, it helps to promote confidence from both taxpayer and administrator perspectives by providing a means of dialogue for understanding differing perspectives and approaches of all stakeholders.
- 8. Through the site visits and meetings, tax auditors would have an opportunity to, amongst others:
- a. Discuss the company's strategic objectives and the potential impact it would have on financials and thereon tax.
- b. Enhance taxpayer relationships based on mutual trust and transparency.
- c. Understand the size and scale of operations.
- d. View and verify the capital and other industrial equipment reported by the company
- e. Identify key sources of information in advance of commencing audit procedures
- 9. Where due to remoteness of other circumstances, physical site visits are not possible, virtual meetings and virtual site walk throughs would be encouraged.

Reviewing historic site visit reports are on the taxpayer's file would be a good alternative in the absence of a physical visit.

10. In planning for the site visit, it would be beneficial for the tax authority to be prepared in advance, having the benefit of the historical information sources and repositories discussed earlier in this chapter. Preparation is key to enable targeted and focused discussions and information gathering. For example, a detailed internal checklist prepared in advance of the meetings would serve as useful guideline. Similarly a checklist may be shared with the taxpayer for provision of information. In the same vein, taxpayers notified in advance would be guided to prepare ahead of the site visits and meetings, such as providing an overview of their operations, safety and other logistical protocols and requirements. For example, protocols related to underground mines may differ from surface mines.

Box 2: Overview of Typical costs across the Extractives Industry Value Chain

11. The table below provides a non-exhaustive summary of the types of costs that are typically encountered at each stage of the extractive value chain and are complementary to the summaries in chapter 1: Overview, the introductory chapter of this manual as well as Chapter 5 of the United Nations Practical Manual on Transfer Pricing for Developing Countries.

	Mining	Oil and Gas
Exploration	 Applying for licenses Obtaining/reviewing geological & geophysical data Surveys Explosives Equipment Technical fees (e.g. geologists) Study costs Drilling Other exploration costs 	 Bidding/applying for licenses & contracts Obtaining/reviewing geological & geophysical data Seismic surveys Exploration drilling Study costs Other exploration costs
Development	 Community Relocation (including compensation) Freight Costs Infrastructure development Equipment (e.g. trucks, loaders, dozers) Surface Stripping 	 Appraisal & development drilling Downhole & wellhead engineering Well completion Production & storage facilities

Table 3 Overview of typical costs across the extractives industry value chain.

	· Crashing	Evacuation infrastructure
	• Crushing	
	• Chemicals and extraction	(pipelines, vessels, terminals)
	infrastructure	• Other development costs
	• Other development costs	
Production	• Infrastructure development	Supplies & services
	• Freight Costs	Repairs & maintenance
	• Equipment (trucks, loaders,	Secondary & tertiary recovery
	dozers)	Marketing/Selling
	Crushing	• Other production costs
	• Milling	
	• Chemicals and extraction	
	materials	
	• Technical, Managerial and	
	Administrative	
	• Refining	
	Marketing/Selling	
	• Other production costs	
Decommissioning/	Restoration	Plugging wells
Rehabilitation ¹¹	Rehabilitation	• Dismantling wellhead &
	• Other rehabilitation and	evacuation facilities
	restoration costs	• Restoration of the site
		Other decommissioning costs
		- Other decommissioning costs

Use of price reporting agency markets data

12. In the extractives industry market information pertaining to commodity prices, quantities, supply and demand data among other information is published by price reporting agencies and extractive sector market research service providers either at a fee through subscription and in some circumstances limited data can be accessed at no cost¹². This information can be of great value for undertaking risk and trend analysis or to serve as a basis for audit adjustments as the information represents thirty party market data on historical and current commodity prices.

4. Tax Audit Process and Issues

 $^{^{11}}$ Refer to Chapter \underline{XX} : The tax treatment of decommissioning for detail on tax issues associated with decommissioning/rehabilitation

¹² An example of a cost free repository: <u>https://www.oecd.org/tax/toolkit-on-comparability-and-mineral-pricing.pdf</u>. See Annex 2, starting pg.227 for a summary list of pricing databases.

- 13. Whilst tax audits of extractive industries can often be lengthy processes due to the complex nature of the industry, tax administrators play a critical role in in administering laws, regulations and agreements in a balanced and objective manner. Through tax audits, administrators can ensure that correct and fair tax is collected. In the same vein, taxpayers receive tax education where aspects of the law are incorrectly applied and are also assured following an audit, that their tax records are satisfactory and acceptable.
- 14. Typical audit processes, i.e. the annual comprehensive risk based audit plan, would differ from jurisdiction to jurisdiction and would depend on the provisions in respective tax laws or tax regime in specific agreements, as well as on the extractive material to be reviewed. Nevertheless typical audit processes are summarised below which may be modified to suit specific circumstances:
 - Firstly, conduct an initial risk assessment or overview of the industry and company/group to be audited. This would help determine the scope and extent of the audit procedures to be undertaken. The outcome of the risk assessment would also bring into scope, the number of officers to be assigned, as well as the specific backgrounds and experience that would add value to the audit.
 - Review of internal processes and documentation to ensure legislation, supporting regulations and specific agreements are applied. In this regard, it is necessary to determine which specific tax laws are applicable for the audit – ie general domestic law, or fiscal terms/laws stabilized by, or set out in specific agreements.
 - Review of taxpayer's reporting and other related compliance to determine taxpayer compliance level.
 - Structure of audit routines and work plan for the sector and the benefits of having a well-structured audit process (including step by step guidance on the audit approach). This would include an overview of:
 - Agreed audit timelines: start dates and anticipated duration of audit
 - Process for providing information and templates
 - Templates for acknowledging receipt of information and requests for further information.
 - Awareness of information and data collection (powers to collect, and impose penalties to mitigate or prevent delays and non-provision of audit information).
 - Approach to post audit reporting and conclusions.
 - Mechanisms to agree extensions of time for audit reports and/or tax collection (for the taxpayer or the tax authority as necessary)
- 15. Advance planning is essential for a successful audit. Below is a general overview of a typical audit planning process.

Planning/Risk Analysis

An audit plan and timing of certain field audit activities is encouraged to be agreed with the taxpayer. This would include areas of audit, nature of information requests to undertake the audit, personnel at the taxpayer to assist, and timelines for each stage to ensure the audit is undertaken within a reasonable time frame agreeable to both tax authorities and taxpayers. To ensure a planned approach, comprehensive preparatory work is required and is likely to involve:

- Undertaking a comprehensive risk assessment which aims to identify key risk areas and areas of focus, including potential materiality.
- Identifying an approach to examining evidence (e.g. sampling high value transactions rather than reviewing each transaction). Supporting documents in the working/official language of the operating jurisdiction (or jurisdiction under audit) are beneficial to avoid misunderstanding in application/documentation-
- Reviewing financial statements, and prior year audit reports including past information relevant to the audit that is on file.
- Reviewing submitted compliance returns (monthly, quarterly and annual tax filings).
- Requesting preparatory information from the taxpayer for desk audit review purposes and to augment information already gathered¹³. This may include:
 - A summary of the ownership and funding structure of the taxpayer
 - Key related party transactions.
 - Detailed Trial Balance and General Ledger.
 - Sales and other agreements.
 - High value imports and local purchases.
 - Other supporting information or questions raised during the audit preparation.

Where possible and permissible, auditors are encouraged to liaise with other agencies to ascertain their understanding of the taxpayer's operations and processes and to obtain further information which may help in the planning process. To the extent available, Country by Country reports would be a useful resource of information.¹⁴ ICAP program and applicable database could serve as a source of understanding what other countries have identified as audit risks.

¹³ Taxpayers should also be encouraged to adopt best practices in dealing with tax authorities. Business at OECD has published suggestions to improve taxpayer engagement with developing countries: <u>https://biac.org/wp-content/uploads/2020/11/Statement-of-Tax-Best-Practices-for-Engaging-with-Tax-Authorities-in-Developing-Countries-Original-release-Sep-2013-1.pdf</u>

¹⁴ Some extractive companies publish Country by Country Reports on their websites for ease of reference. Further references could also be made to the OECD International Compliance Assurance Programme (ICAP), as a potential source of understanding what other countries have identified as audit risks.

Field Audit Recommendations

On the field and considering the need for conducting an efficient audit in a timely manner, a focused approach, borne out of careful and detailed planning is key. Whether the field audit is undertaken in person or remotely, it would involve:

- Introductory meeting:
 - ✓ Hold a preliminary interview with key staff to have a high-level understanding of the business operations.
 - ✓ Introduce the audit team and team leader and also confirm the nature of the audit and expectations.
 - ✓ identify staff members who would be involved and would be providing pertinent information.
 - ✓ Indicate any outstanding information that was requested prior to the site audit and agree on timelines for its submission.
 - ✓ Take all of required material so as not to be dependent on the company and establish professional conduct rules for the field audit (i.e. not to live in Company quarters, to avoid conflict f interest).
- Providing a clear and comprehensive audit information request, based on planning/risk analysis done prior to embarking on field audit. The information request may be regularly updated (keeping duplication of requests at a minimum) to promote efficiency and transparency and to mitigate management delay; it is recommended that updates are kept to a minimum and should be based on the discovery of new information, not necessarily gathered during planning.
- Ensuring there are regular meetings with the appointed management liaison person to provide progress updates and to discuss and identify information gaps.
- Ensuring that an audit debrief session is undertaken prior to leaving the site. Whilst not necessary, this could include providing an initial overview of key issues noted for discussion and highlight any key issues that need clarification, including any additional or outstanding information that is required by the tax auditors. The de-brief would at a minimum, include agreeing next steps and time lines, but may not necessarily involve communicating audit findings (auditors generally need time to review materials and obtain review within the tax authority). The audit team may also use the debrief to offer the taxpayer some education on issues mis-understood or deemed to be incorrectly applied.

Post Audit Reporting and issuance of Audit reports/ Findings

- 16. An initial draft report is recommended to be produced, and after internal tax authority review, subsequent to which detailed preliminary audit findings including the audit report if need be are provided to the taxpayer management. The taxpayer is given a reasonable time frame in which to respond to the preliminary audit findings and also provide further information where necessary before the audit is finalized. The provisions of the audit findings helps promote transparency and fairness in the audit process and ensures that a correct tax assessment is issued if any at the conclusion of the audit and thereby avoiding unnecessary tax disputes.
- 17. The response to audit findings by the taxpayer is internally reviewed and in the absence of any disagreement on the explanations and further information provided by the taxpayer, a revised audit findings letter is issued reflecting, amongst other things, adjustments made to the preliminary audit findings and initial draft report.
- 18. In a case where the audit leads to additional adjustments to the tax return, tax assessments are issued after the revised audit letter is issued, or in some cases after an agreed audit settlement letter with the taxpayer, is issued.
- 19. Other useful references from the United Nations Tax Committee Handbooks which provide reference points for audit related issues include:
 - i. The Chapter on Cost auditing in the TP Manual
 - ii. Chapter 2 on Approaches to avoiding disputes in the Handbook on Avoidance and Resolution of Tax Disputes
 - iii. Chapter 5 in this Handbook as well as the Transfer Pricing Manual

5. Role of Joint Venture Partners

- 20. Auditors may consider whether costs of a venture are reviewed by a partner in a resources joint venture arrangement and may also consider the terms that govern that review process. If the joint venture terms provide for robust reviews, this may potentially provide support for the basis of pricing used, or the level of shared costs arising. For example, it is a common term of many joint venture agreements that these shared costs do not have a mark-up. Other costs may not be audited by the joint venture partners and may require increased focus in an audit.
- 21. Where the national oil, national mining company or Government holds interests in the joint venture, (taking the original audit scope into account) some level of reliance may be placed on audits already undertaken which are intended to protect Government interests.

22. In an unincorporated joint venture, one of the partners is chosen as the operator. The operator carries out day-to-day operations and allocates costs to its non-operator JV partners, known as 'shared costs'. Non-operator partners have an incentive to closely scrutinize the shared costs to avoid being overcharged by the operator. Partner-level costs are those that each joint venture partner incurs separately. For example, in most joint ventures, each partner is expected to access finance independently, which means the payment of interest on loans is not cost recoverable. The risk of cost overstatement is higher because these costs are not policed by the joint venture and are likely to be incurred with related parties, which raises the possibility of abusive transfer pricing. Consequently, governments should prioritise tax audits of separate partner-level costs in addition to reviewing the operator's cost records centrally.¹⁵

6. Domestic Multilateral Tax Audit Options

- 23. Generally, a tax administration's audit function is undertaken by dedicated audit teams charged with the task of auditing the extractive industry. However, in recognition of the varying audit capacity levels and information asymmetries, a number of cooperative initiatives have been developed internationally and at regional levels that offer opportunities for collaborative administrative assistance aimed at strengthening the efficiency and effectiveness of audit capacities in respective tax administrations and at the same enhancing international cooperation to tackle tax evasion and avoidance schemes. These initiatives are legally made possible by countries entering into bilateral or multilateral agreements or contractual arrangements depending on the type of audit initiatives is usually supported by enabling legal provisions for appointing auditors, exchanging information and the keeping of information confidential. The various audit options that countries can adopt, and their objectives are highlighted in the Table 4 below:
- 24. In addition to audits by local tax authorities, alternative or additional audit approaches that can be employed by the tax authorities include:
 - ➢ Joint Audits,
 - Simultaneous Audits,
 - Outsourcing Audits to private audit firms engaged as consultants to the tax authority. This could also include engagement of external subject matter expert consultants as part of tax audit teams.

¹⁵ Examining the Crude Details, Government Audits of Oil & Gas Project Costs to Maximize Revenue Collection, OXFAM Briefing Paper, November 2018, p.36.

¹⁶ Reference may be made to the following UN Manuals for further information: Model Double Taxation Convention between Developed and Developing Countries, Negotiation of. Bilateral Tax Treaties.

➤ UNDP/OECD Tax Inspectors Without Borders (TIWB).

An overview of each audit approach is summarized below:

Table 4 Examples of tax audit choices chain.

Audit Type	Definition/ Description	Legal Basis	Objective
Joint Audit	The joint undertaking of a tax audit on a specific taxpayer in a country where it is resident/domiciled by the local tax administration with either a foreign tax administration or any expert personnel that are not employees of the local tax administration. A single audit team is formed under this arrangement.	 DTA MAAC TIEA AMATM Domestic Legislation Memorandum of Understanding supported by Domestic Law 	To audit specific issues of common interest with goal of sharing information at the end of the separate simultaneous on the
Simultaneous Audit	The undertaking of simultaneous audits by tax administration, each in their own countries on affairs of taxpayers where there is common interest on those tax affairs	 DTA MAAC TIEA AMATM Domestic Legislation 	matter. The information shared is used to confirm compliance or non – compliance
Outsourcing Audit*	Engaging an audit firm or independent auditors on a fixed term contract/ arrangement with a specified scope of work Engaging external subject matter expert consultants as part of tax audit teams	 Contract/ agreement Domestic legislation to appoint or delegate powers of the tax administration 	 To build audit capacity through on the job training Deal with specific audit risks which require specialised industry or tax expertise
Developmental Agencies	The assistance provided by tax experts from a different tax administration or former tax officials to a tax administration in dealing with specific tax issue(s) for	 Memorandum of Understanding Terms of Reference Domestic Legislation to 	Enhance capacity building and share experience in dealing with specific audit matters or challenges that a tax

a given period and scope	appoint delegate	or	administration facing	is
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Box 2: A Practical Spotlight on Outsourcing *A Practical Spotlight on Outsourcing

Historically, a number of tax administrations in Africa have engaged external consultants to provide audit support. These include the tax authorities in Ghana, Sierra Leone and Zambia.

These arrangements have been on a fixed basis with a pre-determined contract length and scope of work. In many cases, these consultants have been from external audit firms, such as the Big 4 or from specialist technical firms. The objective of such outsourcing arrangements are to address a variety of issues which include:

- Expert input into complex business arrangements;
- Capacity building for tax administration staff;
- Independent assessment of key risks and objectives;
- Adding efficiency to audits;
- Access to external databases and resources.

Fee arrangements for outsourced audits have included fixed term fees or a negotiated percentage of additional taxes collected. However, Tax authorities should limit the use of % of tax agreements as they risk creating unwarranted disagreements between the government and taxpayers resulting in un-necessary work and delayed results.

With many such arrangements, there are associated downsides, and the ability of the tax administration to limit risks is principal to achieving the initial objectives of outsourcing. The consultant should at a minimum have the requisite understanding and experience of extractive industry audits to enable a value-added audit.

The potential downsides such as access to classified taxpayer data by non-tax administration staff could be managed by putting into place specific engagement terms and conditions which include pre-set audit objectives, a mechanism for data collection and management, access to taxpayer files and associated confidentiality limitations as well as post audit handover arrangements.

Whilst the outsourced audit, if planned carefully, may generate gains in the short term for the tax administration, the impact on the taxpayer and long-term tax administration objectives should be managed carefully, especially in audits where consultants are engaged on a percentage of tax collected basis and are motivated as such, to the potential detriment of the long term relationship with the taxpayer. As there is potentially no downside to raising issues,

unintended consequences may include disagreements between the government and taxpayers resulting in additional work and delayed results.

It may also be possible to request assistance from other tax authorities, including the provision of temporary secondees. Examples include France providing assistance to Gabon, Australia to Papua New Guinea, and Nigeria to Liberia.

7. Audit Tools

- 25. The audit of large enterprises in the extractive industry usually poses a challenge of auditing voluminous and bulk information relating to operations. In order to enhance effectiveness and efficiency in handling bulk data, it is ideal for tax administrations to invest in appropriate audit tools which may include the following -
- > Use of computers/laptops that have large storage size and higher processing speeds.
 - This could include usage of cloud storage to store data for ease of access. Given this involves taxpayer data, management of the potential for security breach would be critical. Robust firewalls and other data loss prevention mechanisms would be key.
- Electronic Audit Software
 - Use of audit software to extract and analyse large quantities of data; cross checking data reported to tax administrations through various tax returns (VAT/GST, Customs, Royalties); cross checking with data in Country by Country reporting.
 - Tax authorities are increasingly using data analytics to identify anomalies or to conduct exception testing. Examples would include determining an industry trend and identifying outliers as a result; or, determining historical trends and understanding reasons for variances or departures.
- Use of portable scanners, cameras, and smart phones for gathering audit evidence when conducting site audits.
- Subscriptions to extractives industry and other databases and institutions providing industry information on costs, commodity prices¹⁷.

8. Alternative compliance approaches

26. Audits are but one compliance tool that is available to a tax administration. Other tools and approaches that are available to a tax administration to improve

¹⁷ An example of a cost free database: https://www.oecd.org/tax/toolkit-on-comparability-and-mineral-pricing.pdf. See Annex 2, starting pg.227 for a summary list of pricing databases.

compliance in the extractives industry is outlined in Chapter 2 of the UN's Dispute Avoidance and Resolution Handbook¹⁸, including:

- Binding and non-binding guidance and advice provided by the tax administration;
- Advance agreements or forward compliance products that provide certainty of future tax filings of a taxpayer on a particular transaction(s);
- Cooperative compliance approaches that encourage greater transparency and voluntary compliance;
- Transnational compliance initiatives such as Joint Audits and the International Compliance Assurance Programme (ICAP);
- Enforcement of the tax laws and regulations.
- 27. Utilising some or all of these compliance approaches can help provide greater certainty, improve engagement and allow more for efficient use of compliance resources for both taxpayer and tax administration.

¹⁸ INSERT LINK HERE PRIOR TO PUBLISHING

9. Capacity Building Possibilities

- 28. In some jurisdictions, a lack of both audit and industry expertise as well as human resources can hinder the effectiveness of tax compliance activities introduced by tax administrations in the extractives sector. This includes compliance programmes ranging from risk assessment, case selection, audit and dispute resolution. Each of these areas require sector-specific knowledge, experience, as well as information from companies, government agencies, and other jurisdictions.
- 29. Given limited resources, it is common for tax officials to take a selective and riskbased approach to auditing to direct the use of resources into areas that have the highest risk of non-compliance. Notwithstanding this, many developing countries continue to face shortfalls in capacity to adequately address perceived tax risk in the extractive sector. One effective means to close the capacity gap has been to take advantage of capacity building initiatives offered by a number of international organisations and development agencies. Examples¹⁹ include:
- . the UNDP's Tax Inspectors Without Borders initiative
- a. the Base Erosion and Profit Shifting in Mining joint programme offered by the African Tax Administration Forum (ATAF), the Intergovernmental Forum on Mining, Metals and Sustainable Development (IGF) and the Organisation of Economic Development and Co-operation (OECD)
- b. the Extractives and development programme run by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- c. the tax authority education programmes run by the International Tax & Investment Center, particularly in countries which are new to the extractives industry.
- 30. The summary below provides an overview of development areas that may be employed for capacity building, related to improving audit skills and strengthening the understanding and knowledge of the extractive sector, many of which have been discussed in preceding sections of this chapter:
- a. Enhancing interviewing skills,
- b. Enhancing negotiating skills,
- c. Developing Data analysis skills,
- d. Developing Project management skills,

- e. Accounting and audit skills including refresher and possibly certification courses and updates on recent changes,
- f. Regular engagements with industry through industry associates this allows tax authorities to highlight areas of developing concerns and hear updates about issues relevant to the industry,
- g. Independent industry-led training by industry experts (for multiple personnel it may be cost effective),
- h. Hiring personnel with different experience and background e.g. advisory firms, government departments, private sector.

10. Trade Mispricing

- 31. This section addresses the deliberate fraudulent/illegal manipulation of revenue and expenditure pricing in order to evade taxes. However, trade mis-pricing can have other motives apart from tax avoidance that are beyond the scope of this chapter (examples include money laundering and avoiding capital controls). It should be noted that much of the business of the extractives industry is to produce commodities and sell them at an arm's length price which can be readily determined by reference to externally published sources.
- 32. Trade mispricing happens when the declared/reported price of a commercial transaction by one of the parties is higher or lower than the arm's length or market price. Trade mispricing occurs not only in domestic markets but also in international trade. Mispricing within a country, referred to as domestic trade mispricing, concerns both developing and developed countries. Whether in developing or developed economies, trade mispricing on the local market is the result of fraudulent behavior by companies to deliberately evade taxes especially indirect taxes such as VAT or GST. It can range from under/over invoicing of goods sold, to sales that are not reported for tax purposes at all, to fictitious import invoices and/or contracts.
- 33. This section will focus on mispricing for cross-border transactions related to extractive industries.
- 34. In the extractive industries, trade mispricing often seeks to minimize the payments of a number of taxes such as excise taxes, export subsidies, VAT/GST, corporate income tax, tax incentives offered to particular economic zones and/or industries, etc. This case applies to transactions among related parties as well as to deals between unrelated parties.

¹⁹ Active programs as at the time of publication

35. For cross-border transactions, trade mispricing for exports happens in the form of export undervaluation. This usually has a significant negative impact on tax revenue in the form of diminished corporate income tax and ad valorem royalties assessed on sales prices. Conversely, imports can be overstated for the purpose of lowering the taxable revenue and/or illegally transferring income out of the country. This is even more so in the case of restrictive control on foreign currencies. In general, mispricing can occur for various reasons and take different forms, including but not limited to, mis-quoting prices, excessive deductions, or mis-representing quantity or type of valuable element in products.

What are the reasons for international trade mispricing?

- 36. As noted above, trade mispricing can occur in relation to third party transactions or between related parties or within an MNE. For related party transactions, trademispricing can be contrasted with transfer pricing where there is a requirement that transactions with related parties apply arm's length prices and where there is potential for genuine disagreements to arise between tax authorities and taxpayers in relation to the price of related party transactions. This is an issue of transfer pricing dealt with in chapter 5 of this Handbook.
- 37. This section will focus on trade mispricing with non-related parties. Trade mispricing is the deliberate and fraudulent practice of understating exported products, -by price, volume, content or all three- and conversely overstating imported products. Such scheme will obviously involve the use of unreported accounts or other forms of compensation. Although trade mispricing has some similarities with abusive transfer pricing, such as exploitation of a number of tax advantages including excise taxes, export subsidies, VAT/GST, corporate income tax and tax incentives offered to particular economic zones and/or industries etc, it is distinctly different in the following manner:
 - Trade mispricing involves fraudulent and criminal behavior. In some instances, it can therefore be characterized as illicit financial flows.
 - Trade mispricing does not require the involvement of related parties.
 - Trade mispricing can take the form of forged invoices or sales contracts to and from third parties, as well as the undocumented cross-border movements of goods.
- 38. Motives a company may have to overprice imports or under-price exports or vice versa may include:
 - paying less VAT/GST on imports in the case of misquoting the price (undervaluing) imports,

- lowering the taxable profit and payment of income tax in the case of misquoting the price (overvaluing) imports, or
- transferring revenue out of the country in the case of undervalued exports.
- 39. The latter case can happen in a country where foreign reserve restrictions are in place and as such would most likely have a twofold impact: i) non-payment of taxes, and ii) deterioration of the balance of payments with excessive outflows of foreign currencies. The consequence of the latter is particularly damaging where trade mispricing occurs in the extractive sector, as developing countries are highly reliant on the extractive sector to contribute to its foreign currency reserves. The foreign currency reserves are in turn is used to pay government debts that are typically denominated in foreign currency. The illicit erosion of foreign reserves through trade mispricing therefore can place significant pressure on the solvency of a country's treasury. Table 5 below summarizes the different scenarios²⁰.
- 40. Another aspect of concern sometimes classified as case of mispricing relates to the deliberate non-declaration of the presence of by-products or the deliberate misrepresentation of the content of a certain mineral.

Trade	Overinvoicing	Underinvoicing
Exports	Gains for export subsidies	Capital flight, avoiding export tax
Imports	Capital flight, lowering profit tax	Evading import duties

Table 5 Impact of trade mispricing

Impact of trade mispricing on country revenue

41. It has been argued that at a country level some of these scenarios may impact the economy in opposite directions and possibly cancel each other out. However, if underinvoicing of exports is used more than overpricing of imports, the result is both capital flight and tax evasion. This issue may be better explained by a simple numeric example.

²⁰ Reproduced from Volker Nitsch. 2012. "*Trade Mispricing and Illicit Flows*." in World Bank: Draining Development: Controlling Flows of Illicit Funds from Developing Countries

- 42. Company C operating in Country X exports a type of mineral valued at US\$100million and receives US\$100million but it declares US\$ 85million in its invoice and accounts, which is 15% less than the actual/real value received by Company C. In other words, Company C officially receives US\$ 85 million, and the Company A receiving the merchandize will transfer the difference (US\$15million) to another unreported account held by Company C. Company C on evidence has deliberately under reported US\$ 15 million by deliberately misquoting the price of its export. At the end of the year Company C realizes a profit of US\$ 10 million recorded in its filing with Country X's Tax Authorities for tax declaration purposes. With a tax rate of 30% on income Company C is required to pay US\$ 3 million in taxes. If Company C had declared the true value of its exports for US\$ 100 million, it would have been required to pay income tax of US\$ 7.5 million. This shows that with exports 15% undervalued, Country X loses 60% of its tax (US\$ 4.5 million over 7.5 million).
- 43. This example illustrates the magnitude of revenue loss a country may face when a company manipulates the price of its exports by mis-quoting the price of its exports by a few points of a percentage. A comparable effect would occur if the price of its imports (machinery or services) were to be overstated by a few points of a percentage. The potential effect on tax collection and country foreign reserves can be multiplied if the two effects are combined. This demonstrates the negative impact of trade mispricing in extractives industries in developing countries.
- 44. Whilst the issue occurs in practice, issues arise as to how to value the resulting impact. More importantly how to prevent its occurrence from a front office compliance and an audit perspectives.
- 45. Some experts have argued that there no single variable more important to determine the revenue of a mineral producing country than the price of the mineral.
- 46. Tax authorities are encouraged to closely monitor price data on global commodity market exchanges to detect changes in price that may help benchmark the price paid for the local production and to strengthen the technical skills of their compliance officers.
- 47. Understandably, this is by no means an easy task, as the price index may not reflect the grade/content of the raw mineral extracted. This may involve some technical testing. For a country endowed with substantial natural resources, it may be worthwhile to develop the required expertise within the tax administration. Selected consultancy firm expertise or recourse to advisory services from some development agencies may be an option. The exchange of information clause, especially between countries with a Double Tax Convention can be a useful tool to detect suspected cases of mispricing.

Detecting, identifying and auditing trade mispricing

48. With regard to mispricing with non-related parties, broader initiatives are required such as improving the exchange of information and cooperation between customs authorities and other authorities in different jurisdictions.

Use of benchmark and reference prices for tax collection purposes.

- 49. Tax administrations in many countries, developing and developed alike, have used quoted prices from reputable agencies to adjust the value of export volume for tax calculation purposes. Some difficulties can arise, however. Often minerals are traded in intermediary forms such as blister copper, pig iron and ore concentrate, but the quoted price is for the refined metal (quoted metal). In such cases the reference price needs to be adjusted by deducting treatment and refining costs. Other elements to consider while computing the benchmark price include the quality or grade of the mineral, delivery dates, currencies, freight costs, among other things. It is important to use renowned sources for reference prices.
- 50. In Norway for instance, the Petroleum Price Board (PPB) sets the reference oil price to be used in calculation of taxable income. The PPB meets every quarter and sets a daily norm price for each oil field to be applicable to the calculation of taxable income for the previous quarter. Companies may appeal the set norm price within 30 days. Some other oil producing countries, including Angola and Indonesia, have also adopted to value oil at a price set by government agency for tax valuation.
- 51. In instances where the commodities are sold below market prices, it is necessary to document all data and inputs that account for such low value. For instance, this may happen when a producer sells to a trader at a deep discount to account for other aspects of the mining business such as prior provision of capital, production risk, processing functions, etc. Long term contracts with price included also exist and many cases the price may be defined or pegged against variables such as exchange rates or content of metal. Such deals need to be scrutinized by the tax authority to make sure they are economically justified.

52. In Laos PDR, the Ministry of Energy and Mines sets a reference price based on the London Metal Exchange (LME) price for copper to assess royalties payable to the government on copper production. The reference price is based on the determination of the content of the metal in the mineral, the transport, insurance, and handling costs and other inputs.

Source of data for monitoring and price adjustment in extractive industry transactions

- 55. Another challenge for tax authorities auditing and identifying trade mispricing in the extractives industries is the development and maintenance of a reliable database of prices, marketing costs, level of royalties, across the value chain. For countries substantially endowed in natural resources a long-term strategy to build a national repository of strategic information may be worth the cost. This can start by collecting and assembling already existing information from various national resources such as the Ministry of Mining and Oil and Gas, the Customs and Revenue Services, Environmental agencies.
- 56. One of hurdles in this endeavour might be the aggregate nature of official statistics. For instance the export of a given metal might be recorded as one category without any distinction according to the grade (purity or content percentage) of the metal, rendering comparisons almost impossible. However, at a national level the major players (for 80% of export of a given mineral) are always well known and in a very limited number. Therefore, their transactions can be identified and recorded at a granular level. Some ethical issues on how to handle and protect individual company data will need to be addressed.
- 57. Regional Economic Blocs and other international Organizations can also be another source for comparability data. For long term strategy those regional and global institutions may assess the potential for building a global database for shared usage.

Abbreviations Used

AMATM	Agreement on Mutual Assistance in Tax Matters
DTA	Double Taxation Agreement
FTA	Forum on Tax Administration
GST	Goods & Services Tax
MAAC	Convention on Mutual Administrative Assistance in Tax Matters
MNE	Multinational Enterprise
TIEA	Tax Information and Exchange Agreement
TIWB	Tax Inspectors without Borders
UNDP	United Nation's Development Plan
VAT	Value Added Tax