Oil & Gas
Cooperative audits

Public revenues from Oil & Gas Production
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OLACEFS – Organization of Latin American and Caribbean Supreme Audit Institutions

Public revenues from Oil & Gas production defined as strategic theme by OLACEFS Capacity Building Committee

Cooperative performance audit: institutional development among SAIs

Participants: Brazil (coordinator), Colombia, Peru
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• Preliminary actions

➢ GIZ sponsored the hiring of a Consulting group (TCU prepared terms of reference and selected EnerRio)

➢ Diagnosis on institutional and regulatory conditions related to the oversight of public revenues from O&G production (EnerRio)

➢ Research on themes of common interest among participating SAIs (EnerRio)
Institutional and Oversight models

- Oil and Gas sector recent institutional developments
- Basic legislation
- Current regulatory model
  - Institutional structure
  - Contract features
  - State revenues – government takes
- Oversight model
  - How audits are conducted
  - Oversight features – qualities and weaknesses

8 Countries (OLACEFS)
Comparative diagnosis

Comparative analysis

Fiscal regime

Institutional model

Oversight mechanisms

Best practices and common audit’s challenges
Comparative analysis of Institutional and Oversight models

- Institutional model comparison
- Oversight mechanisms comparison
- Oversight features

Identify best practices and weaknesses of oversight mechanisms within OLACEFS region

Portfolio of cooperative audits themes
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• Themes of common interest

  ➢ Measurement, calculation and payment of government take

  Theme of choice by participating SAIs

  ➢ Standardization of oversight processes

  ➢ Oversight of declared costs

  ➢ Aspects of technical regulation: gas burning, limits on self-consumption, production during exploration
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Institutional and regulatory framework
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➢ **Complexity level of government takes**: it may facilitate or make state oversight actions more complex (ex. reference price, deduction of costs....)

➢ **Oversight institutional organization**: regulatory institutional framework of each country also determines the competences of the governmental entities in charge of the oversight activity and their respective power and level of independence in relation to the audited agentes

➢ **Assymmetry information**: this is more relevant when there is a need to oversee production costs, as in the cases of Brazil and Peru
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Methodology

- Common planning
- Audits executed by each country
- Independent reports
- Consolidated reports

Coordinated audit:
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• Common planning

➢ TCU designed a preliminary planning matrix

➢ On May 2013, Brasilia:
  ✓ Seminar for technical leveling of audit teams (EnerRio)
  ✓ Discussion and approval of planning matrix
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• Execution

➢ Each SAI conducted its own audit independently

➢ On October 2013, Rio de Janeiro:
  ✓ Technical visit to a Petrobras offshore platform – direct observation technique
  ✓ Meeting to discuss current development of audits
  ✓ Reference panel with Brazilian O&G Regulatory Agency - ANP

➢ On December 2013, Colombia:
  ✓ Discussion panel on audit findings
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• Report

➢ Each SAI prepared its own report, based on TCU model
➢ Each SAI prepared a note on its perceptions about the results of the coordinated audit
➢ TCU prepared a final report to disclose and disseminate the experiences and achievements of the coordinated audit
Cooperative audit on Oil & Gas - Scope

Production measurement
- Does the production measurement oversight have the required principles to reasonably ensure reliability and integrity of the produced volumes?

Calculation and payment of the government take
- Does the oversight of government takes from oil and gas have the required principles to reasonably ensure reliability, integrity and timing of the owed values?

Transparency
- Are data and information on the production measurement and the calculation and payment of government takes officially made available in a transparent, accessible and friendly manner in order to allow their replicability by an interested third party?
Preliminary study: it is assumed that the best oversight actions have, in general, the following characteristics:

- **High technical quality of the measurement system**, including meters and means for data transmission and storage;
- **Use of information systems** for verification of veracity and consistency of the performed measurements, and;
- **in situ inspections** for authorization and supervision on measurement systems;
➢ registration of volumes produced based on meters that meet minimum technical requirements, without the risk of manipulation by third parties, so that this registration can be checked by audit institutions;

➢ regular verification of measurement system compliance (technical standards);

➢ routine verification of non-compliance related to registered volumes;

➢ oversight actions: sufficient to create a reasonable control expectation in the audited agents;

➢ treatment of non-compliances, including corrective and penalty measures.
The most important issue for the oversight of production measurement is how the data registered by meters is accessed by the governmental entity in charge, considering the need that such data is complete and reliable.

From the oversight perspective, the production measurement brings up big challenges: such activity involves the use of expensive technology content and demands complex processes, which implies the need of technical knowledge and the use of specialized labor.
In general, O&G production measurement processes in Brazil, Colombia and Peru have the necessary requirements to ensure, reasonably, the reliability and integrity of the volumes produced.

**Br**
- Development of a computer system specifically designed for production measurement oversight
- Need of implementing all of its functionalities

**Co**
- High adherence level regarding rules and technical manuals
- Recommendation for improving the technological resources used for the production measurement oversight

**Pe**
- Oversight conducted directly in the production fields by contracted agents, who act according to Perupetro S.A. guidelines
- Need of improving this contracting procedure due to risk of service continuity
➢ All major onshore and offshore production units have high-tech measurement systems;

➢ Daily monitoring of oil production measurement: ANP receives, through the internet, daily, data on oil production and information about any inconsistencies in the measurement systems

➢ Improvement of oversight methodology
• **Measure** field production.
• **Issue periodical reports** on the measurement data.

* The system allows ANP to directly access the measurement data on a regular basis. Such mechanism does not substitute the reports sent by the operators, but it serves as a checking tool.
Production Measurement - Colombia

- **Measure** field production.
- **Issue periodical reports** on measurement data.

**Operators**

**Governmental regulatory entity**

- **Receives the data** declared by the operators over the measured volumes.
Production Measurement - Peru

Operators

- **Measure** field production.
- **Issue periodical reports** on the measurement data.

Contracted supervisors

- **Verify** the measurement made by the operators in the fields.
- **Sign the periodical reports** together with the operators.

Governmental regulatory entity

- **Receives the data** declared by the operators (together with the contracted supervisors) about the measured volumes.
- **Verify and control** the contracted supervisors.
Preliminary study: good control practices over government takes:

- Use of computer systems integrated with production measurement databases, for standardization and automation purposes of involved calculations;
- Standardization and automation of the ratifying systems, in those cases in which the calculation is performed by the production companies;
- Standardization and integration of the processes for confirmation of payments;
- Development of specific cost audit practices, in the cases in which the calculation of government takes involves net values, with cost and expense deduction.
Calculation and payment of government takes Criteria

- **Regular check** of calculated values, preferably in an automatic manner;
- **Timely check** of the payments performed by operators;
- **Routine verification** of non-compliances;
- **Treatment of non-compliances**, including corrective and penalty measures;
- Oversight actions: sufficient to create a **reasonable control** expectation;
Calculation and payment of government takes

Results

In general, the oversight of calculation and payment of government takes **have** the required principles to ensure reasonably the reliability and timing of the calculated amounts received by the State.

- **Br**
  - Need of more robust **mechanisms to check and confirm** data and information declared by the operators
  - Need of more precise **criteria** to qualify municipalities for benefiting from **royalties distribution**

- **Co**
  - Oversight **process** is highly **computerized** and no calculation errors were found
  - Recent **competence transfer** from MME to ANH was made before ANH was fully prepared to execute its new roles

- **Pe**
  - Constant **readjustments and recalculation**s related to royalties using the “R Factor” method
  - Some regulatory rules are ambiguous and outdated
Calculation and payment of government takes Brazil

CONCESSIONAIRES

TREASURY

Fed. Government

ANP

BANK OF BRAZIL

Municipalities

States

Financial flow
Documents flow
The quality of an oversight process, whether of production measurement or calculation and payment of government takes, depends also on other factors, such as:

- **Timing**;
- **Transparency**;
- **Controlled levels of discretion in the decisions made by the supervision institution**.
Need of public access to the following information:

- Hydrocarbons volumes produced in a given period of time;
- Government takes amount, with the respective formulas and calculation logs;
- Other variables required for the replicability of the values and, above all, the total amount of the government takes;
- Dateness and timing of the available information; and
- Eventual explanatory notes and supplementary information.
The countries take measures to provide data and information related to:

- hydrocarbon production measurement and;
- government takes

Despite being in general accessible and available, there is a need of mechanisms to provide a friendlier use of this information by interested third parties.
Analysis of the cooperative audit experience

Since it was a pilot project, it is important to express, from the participating SAI point of view, the vision on this work from two perspectives:

➢ Main results of the audit for the countries;

➢ Main results of the audit for the SAIs;
Main results of the audit for the countries

- Clear data and analysis regarding the oversight of public revenues;

- Improvement of hydrocarbon production oversight mechanisms (initiatives for changing regulations, IT benchmark);

- Colombia: the audit contributed to show, before the public opinion, the Comptroller role as reference, nationwide, in the evaluation of public policies related to oil and gas sector;
Main results of the audit for the countries

- Peru: the audit contributed to strengthen its condition as a country “that has met its obligation” to the requirements and standards set forth by the EITI (2012);

- Brazil: best practice – the system used by ANP to access directly the data from the production measurement implies higher reliability on the Agency management;
Main results of the audit for the SAIs

- Comparative perspective: debate about common challenges and good practices;

- Improvement of audit techniques, specially performance audits: improvement of SAI performance as a whole in the exercise of their function as external control entity, and to the achievement of their purpose to contribute to management and performance improvement in different public administration areas;
Main results of the audit for the SAIs

➢ Colombia: first successful exercise to execute a performance audit on an issue that is so significant for the country; the acquired knowledge on performance audit practices generated an interest in different SAI areas to replicate them to other issues;

➢ Peru: team training in performance and cooperative audit practices;

➢ Brazil: experience of coordinating the audit; wider information exchange and relation with other SAIs.
Next Steps

➢ Creation of an audit network specialized and trained on performance audits;

➢ Common interest in the conduction of a cooperative audit on mining, since it has a significant importance for the economy of several countries in the region and it poses important challenges to its effective oversight;

➢ Portfolio of themes to other cooperative audits
Thank you!

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