

Chapter 3 - Audit Approach

3.1 Request for Audit by MoPNG

In November 2007, the Secretary, MoPNG requested the CAG of India to conduct a special audit of PSCs for eight blocks (viz. Ravva, Panna-Mukta, Tapti, KG-DWN-98/3, RJ-ON-90/1, Hazira, KG-OSN-2001/3, and PY-3) for which regular audit had already been carried upto 2003-04/ 2004-05. MoPNG's request was made in the context of large stakes of the Government in the form of royalty and profit petroleum, and concerns voiced in some quarters about the capital expenditure being incurred by some contractors in the development projects awarded under NELP.

In March 2008, we agreed to the MoPNG's request for audit, indicating that we would be covering, in the first instance, five blocks - Panna Mukta, Tapti, KG-DWN-98/3, Hazira, and PY-3 - out of the eight blocks for which special audit was requested by MoPNG (with the audit of the remaining three blocks to be taken up subsequently in a phased manner). We also subsumed a Performance Audit of Hydrocarbon PSCs, covering a sample of discovered/ pre-NELP PSCs and NELP PSCs²² (for which an entry conference had been held in November 2007 with the then Secretary, MoPNG) into MoPNG's audit request.

3.2 Audit Objectives

The main objectives of the Performance Audit of Hydrocarbon PSCs were to verify whether:

- The systems and procedures of MoPNG and DGH to monitor and ensure compliance by the operators and contractors of the blocks with the terms of the PSCs were adequate and effective; and
- The revenue interests of the Government (including royalty and GoI share of profit petroleum) were properly protected, and adequate and effective mechanisms were in position for this purpose.

Concerns have been raised in certain quarters as to our conducting "Performance Audit" of individual blocks, and the operations/ activities of the contractors/ operators thereof. We take this opportunity to clarify that the scope of our performance audit covered the Ministry of Petroleum and Natural Gas (MoPNG) and the Directorate General of Hydrocarbons (DGH) and not the private operators of individual blocks.

Consequently, access to the records of the operators of selected blocks was only supplementary to the scrutiny of records of MoPNG and DGH.

The purpose of access to, and scrutiny of records of the operators was to verify whether the Government's revenue in the form of profit petroleum (current and future²³) and royalty

²² Originally, a sample of 22 PSCs was selected; subsequently, this was modified slightly.

²³ Since recovery of costs could affect GoI's future share of profit petroleum.

was correctly calculated, and its revenue interests were properly protected. Towards this larger objective, we intended to verify (based on access to operators' records for the specified accounting periods) whether:

- Capital expenditure (capex)²⁴, operating expenditure (opex), and net cash income and individual items thereof were accurately and reliably reflected, and these amounts were supported by adequate documentation;
- The figures of individual items of capex/ opex were reasonable, and also commensurate with original/ revised budgets, plans, feasibility reports or other similar documents; and
- There was collateral evidence which would provide assurance regarding the authenticity of goods and services procured and provided.

3.3 Audit Scope

The audit scope covered a twin approach:

- Scrutiny of records at MoPNG and DGH in respect of a sample of **20 PSCs** so selected as to provide a balanced coverage of (a) onshore and offshore (shallow and deepwater) blocks (b) a cross section of operators (c) fields with oil discoveries and gas discoveries (d) pre-NELP and NELP and (e) blocks at different stages of E&P – under exploration, relinquished, discovery, production etc.; this covered the period from 2003-04 to 2007-08.
- Supplementary scrutiny of records of the operators of **four blocks/ fields** (KG-DWN-98/3, Panna-Mukta, Mid & South Tapti and RJ-ON-90/1) covering the two year period 2006-07 and 2007-08.

The blocks selected for the audit review are listed below; details (in brief) are indicated in **Annexure-3.1**.

Table 3.1 – Blocks Selected for the Audit Review

Sl. No	Contracting Parties	Operator	Basin	Block/ Field	Pre-NELP/ NELP	Shallow/ Deep water/ Onland	Status
1	BGEPIL, ONGC & RIL	BGEPIL	Mumbai Offshore	Panna/ Mukta	Medium sized	Shallow water	Producing
2	BGEPIL & ONGC	BGEPIL	Mumbai Offshore	Mid & South Tapti	Medium sized	Shallow water	Producing

²⁴ i.e. Investment expenditure considered under the terms of the PSC for computation of Investment Multiple

Sl. No	Contracting Parties	Operator	Basin	Block/ Field	Pre-NELP/ NELP	Shallow/ Deep water/ Onland	Status
3	CEIL, CEHL & ONGC	CEIL	Barmer Rajasthan	RJ-ON-90/1	Pre-NELP	Onland	Producing
4	RIL & NIKO	RIL	Krishna Godavari	KG-DWN-98/3	NELP-I	Deepwater	Development/Producing
5	GSPC & GAIL	GSPC	Cambay	CB-ONN-2000/1	NELP-II	Onland	Producing
6	ONGC	ONGC	Cauvery Offshore	CY-OSN-2000/1	NELP-II	Shallow water	Relinquished
7	ONGC	ONGC	Pranhita-Godavari	PG-ONN-2001/1	NELP-III	Onland	Exploration
8	RIL & HEPI	RIL	Krishna Godavari	KG-OSN-2001/2	NELP-III	Shallow water	Exploration
9	OIL & ONGC	OIL	Rajasthan	RJ-ONN-2002/1	NELP-IV	Onland	Exploration
10	RIL & HEPI	RIL	North Eastern Coast	NEC-DWN-2002/1	NELP-IV	Deepwater	Exploration
11	RIL	RIL	Kerala Konkan	KK-DWN-2003/1	NELP-V	Deepwater	Exploration
12	Petrogas, GAIL, HPCL, GSPC & IOC	Petrogas	Mumbai Off.	MB-OSN-2004/2	NELP-VI	Shallow water	Exploration
13	RIL	RIL	Mahanadi-NEC Offshore	MN-DWN-2004/3	NELP-VI	Deepwater	Exploration
14	CEIL, Tata Petrodyne & ONGC	CEIL	Cambay offshore	CB-OS-2 Lakshmi	Pre-NELP	Offshore	Producing

Sl. No	Contracting Parties	Operator	Basin	Block/Field	Pre-NELP/ NELP	Shallow/ Deep water/ Onland	Status
15	CEIL, Tata Petrodyne & ONGC	CEIL	Cambay offshore	CB-OS-2 Gauri ²⁵	Pre-NELP	Offshore	Producing
16	RIL, TIOL & OOHL	RIL	Cambay	CB-ON/1	Pre-NELP	Onland	Exploration
17		Essar Oil	Mumbai Offshore	Ratna R-Series	Small sized	Offshore	PSC not signed
18	NIKO & GSPCL	NIKO	Cambay	Hazira	Small sized	Onland	Producing
19	ONGC & GAIL	ONGC	Kerala Konkan	KK-DWN-2000/2	NELP-II	Deepwater	Relinquished
20	ONGC & IOC	ONGC	Mumbai offshore	MB-DWN-2000/1	NELP-II	Deepwater	Relinquished
21	RIL	RIL	Mumbai Offshore	MB-OSN-97/3	NELP-I	Shallow water	Relinquished

3.4 Sources of Audit Criteria

The main sources of audit criteria were the following:

- Oil Fields (Regulation and Development) Act, 1948;
- Petroleum and Natural Gas Rules, 1959;
- New Exploration Licensing Policy (NELP) and subsidiary instructions of MoPNG;
- Bid documents viz, Bid Evaluation Criteria (BEC), Notice Inviting Offers (NIOs) and Model Production Sharing Contracts (MPSCs) for different NELP rounds; and
- Signed Production Sharing Contracts (PSCs) of selected blocks.

3.5 Difficulties in access to operators' records

Our audit effort was interrupted, due to difficulties in obtaining access to the records of the operators. The problem arose initially in July 2008 in respect of the records of the Panna-

²⁵ CB-OS-2 Lakshmi and CB-OS-2 Gauri involve a single PSC, but two separate fields, resulting in a total of 20 PSCs but 21 fields within our audit sample

Mukta and Tapti fields (PMT Joint Venture) but could not be resolved for an extended period of time, despite correspondence with MoPNG (and issue of instructions by MoPNG to the operators) as well as interactions with MoPNG and the operators.

Audit Provisions in the Production Sharing Contract (PSC) – A Summary

Articles 25.4 and 25.5 of the PSC provide that:

- The annual audit of accounts shall be carried out on behalf of the contractor by a qualified, independent firm of recognized chartered accountants registered in India and selected by the contractor with the approval of the MC, and a copy of the audited accounts shall be submitted to the GoI within 30 days of receipt;
- The GoI shall have the right to audit the accounting records of the contractor in respect of petroleum operations as provided in the Accounting Procedure, and for the purpose of this audit, the contractor shall make available to the auditor all such books, records, accounts and other documents and information as may be reasonably required by the auditor.

Further, Section 1.9 – Audit and Inspection Rights of the Government – of the Accounting Procedure to the PSC provides, *inter alia*, that:

- The GoI shall have the right to inspect and audit “*all records and documents supporting costs, expenditures, expenses, receipts and income, such as contractor’s accounts, books, records, invoices, cash vouchers, debit notes, price lists or similar documentation with respect to petroleum operations conducted in each financial year within two years (or such longer period as may be required in exceptional circumstances)*” from the end of the relevant financial year;
- The GoI may undertake the conduct of audit either through its own representatives or through a qualified firm of recognized chartered accountants registered in India or a reputed consulting firm;
- In conducting the audit, the GoI or its auditors shall be entitled to examine and verify “*all charges and credits relating to the contractor’s activities under the contract and all books of account, accounting entries, material records and inventories, vouchers, payrolls, invoices and any other documents, correspondence and records considered necessary to audit and verify the charges and credits*”.
- The procedure for issuing, responding to, and resolving audit exceptions has also been laid down.

The matter was finally taken up by the CAG in August 2009 with the then Minister, Petroleum and Natural Gas (PNG) for expediting access to the operators’ records, in response to which, the then Minister, PNG provided assurances for such access. We are grateful for this.

Consequently, in September 2009, in view of the extreme difficulty in access to records of operators for earlier years (upto 2006-07), we suggested a revised audit approach, whereby we requested access to the operators of four blocks (Panna-Mukta, Mid & South Tapti, KG-DWN-98/3 and RJ-ON-90/1) covering a two year period from 2006-07 to 2007-08 (with access to records of previous years linked to transactions of current years). We also clarified the scope and extent of our scrutiny of operators' records, and indicated the initial list of records required from the operators.

After further correspondence and interaction with MoPNG, and issue of further directions by MoPNG to the operators on 27 November 2009, the initial records requested by us were finally provided by the operators and "kick-off"/ preliminary meetings held with the operators. Subsequently, field scrutiny of the records of the operators of the four blocks commenced between January and May 2010.

3.6 Audit Methodology

Field scrutiny of records by the audit teams included issue of audit requisitions and Preliminary Observation Memoranda (POMs)/ Audit Memoranda (AMs) to MoPNG/ DGH as well as the operators. Discussions were held at various points of audit with MoPNG/ DGH as well as with the operators during scrutiny of their records. Interactive sessions were held in June 2011 with the MoPNG and representatives of two operators to discuss certain key audit issues, on which clarifications were sought.

Thereafter, the draft Audit Report was issued to MoPNG in June 2011, requesting its response/ comments. Subsequent to the issue of the draft Audit Report, an Exit Conference was held in July 2011 with MoPNG/ DGH and the operators of the four blocks (Panna-Mukta, Tapti, KG-DWN-98/3 and RJ-ON-90/1) to discuss the major draft audit findings; at this Exit Conference, representatives of operators of two blocks (KG-DWN-98/3 and RJ-ON-90/1) also made detailed presentations, explaining their position on various issues. The Exit Conference also included a separate session with MoPNG/ DGH to discuss the draft audit findings relating to the role/ activities of MoPNG/ DGH.

MoPNG provided a detailed response to the draft audit report, and also forwarded copies of the responses of some of the operators with their comments thereon.

The responses/ comments furnished by MoPNG, as well as responses furnished by the operators during the Exit Conference, have been duly considered and incorporated, to the extent deemed appropriate, in this Audit Report.

We acknowledge the co-operation and assistance extended by the Ministry of Petroleum and Natural Gas, DGH, and the operators of two blocks (RIL and Cairn Energy in respect of KG-DWN-98/3 and RJ-ON-90/1) during the course of our audit of MoPNG/ DGH and scrutiny of operators' records.

3.7 Audit Scope Limitation

3.7.1 Production of Records by PMT Joint Venture

In order to fulfill our audit objectives and scope, during scrutiny of the records of the Panna-Mukta and Tapti blocks, operated by the Panna-Mukta Tapti Joint Venture (PMT JV), we sought access to records relating to pre and post contract award/ purchase order documents (e.g. bidding documents, purchase orders, change orders, procurement files and contracts) relating to two key development projects of these blocks viz. EPOD (Expanded Plan of Development) for Panna-Mukta and NRPOD (New Revised Plan of Development) for Mid & South Tapti, and other supplementary documents from British Gas Exploration and Production India Ltd. (BGEPIIL), a joint operator for the PMT JV being the identified partner for furnishing records and documents for our field scrutiny.

However, BGEPIIL did not produce many of the relevant records on the ground that Government audit was under Section 1.9 of Appendix C to the PSC, and was therefore limited to the accounting records of the JV. ***We do not agree with the views expressed by the PMT JV. In our opinion, the records sought by our audit teams (in particular the procurement-related records) were fully covered by Section 1.9 of Accounting Procedure to the PSC, and access to such records was essential for the purpose of our scrutiny.***

In addition to the non-furnishing of critical records, the PMT JV also did not respond to the majority of our POMs, on the ground that the issues raised therein were outside the scope of audit rights set out in the PSC.

Consequently, our scrutiny of the records of Panna-Mukta and Tapti blocks for 2006-07 and 2007-08 and findings arising thereon, as reflected in this audit report are incomplete, due to reasons beyond our control. We were also unable to vouchsafe the reliability of expenditure stated to have been incurred by the PMT JV during 2006-07 and 2007-08.

Based on the audit scope limitation indicated in the draft report issued to the MoPNG, DGH again directed PMT JV (22 June 2011) to provide the requested records. During the exit conference (12 July 2011), the PMT JV offered to provide records under Article 26.8 of the PSC (relating to inspection of records by the GoI) and not under Article 25 (which cover the auditing rights of GoI), if GoI made a request to this effect under Article 26.8. However, the representatives of MoPNG and CAG did not agree to the PMT JV's offer and insisted on the production of requested documents/ records under Article 25 of the PSC.

Subsequently, on 14 July 2011, the PMT JV indicated that they would provide the requested documents that were readily available at the earliest, in any event within the next seven days to our audit teams. They also indicated their readiness to submit other documents and records, as may be requested by our audit teams. However, they clarified that the submission of information would be without prejudice to their position on the scope of audit i.e. with respect to a financial audit contemplated under the provisions of the PSC in respect of 2006-07 and 2007-08.

On 20 July 2011, the PMT JV furnished part of the relevant records/documents requested by our audit teams. Subsequently (22 July 2011) the PMT JV furnished 10 service contracts (except price bids) in respect of NRPOD/EPOD project and assured that they would be furnishing the remaining records/documents shortly.

We take note of the assurance provided by PMT JV, as well as the documents provided on 20/22 July 2011 by the PMT JV. However, the records cannot obviously be scrutinised in time for the relevant findings to be included in this audit report.

The records furnished recently by the PMT JV as well as those records, in respect of which assurances have been received, will be covered in scrutiny of the records of the operator (PMT JV) for future years, and audit findings arising thereof included in subsequent audit reports.

3.7.2 Production of records by other operators

In respect of KG-DWN-98/3, RIL provided all records requested by audit teams, except for:

- Forward linkages to future years of transactions/ payments undertaken in 2006-07 and 2007-08 (period covered for scrutiny of operators' records);
- Complete accounting data on the SAP IT system (including both the expenditure i.e. debit side, and the credit side of transactions/ line items); this is described subsequently in Chapter 4.

No problems were encountered in respect of records requested from the operator of RJ-ON-90/1 block (Cairn Energy). In fact, the operator also provided extracts of records relating to periods outside our scope in order to clarify/ explain issues raised by us during the course of record scrutiny.

3.8 Comments on Audit Scope by Operator(s)

3.8.1 KG-DWN-98/3 block

The operator of KG-DWN-98/3 block (RIL) challenged the scope, extent and coverage of our audit at various points of time – during the course of field scrutiny of records, in a presentation at the Exit Conference, and also in written responses furnished by MoPNG. According to the operator,

- The audit scope was limited by Article 25.5 of the PSC, read with Section 1.9 of the Accounting Procedure. The right to audit under Section 1.9 of the Accounting Procedure was limited to verification of charges and credits (authenticity of expenditure) and inspection of books and records.
- The accounting audit by Government-appointed auditors was to be conducted within two years from the end of a financial year. The audit rights for 2006-07 had already been exercised by Gol. MoPNG confirmed (November 2009) that audit was under section 1.9 of the accounting procedure.

- Despite MoPNG’s communication, CAG had conducted a “performance audit”, which was not permitted under the PSCs, as:
 - ❖ All operational and technical matters were under purview of the Management Committee (MC), and were governed, regulated and measured by GIPIP (Good International Petroleum Industry Practices); and
 - ❖ Accounts auditors were not familiar with GIPIP;
 - ❖ Audit was limited to verification of charges and credits. GIPIP, and not audit, was the measure of performance in a PSC.
- Nothing in the PSC permitted an audit of the operational, commercial and technical decisions of the operator.
- With regard to one audit objective (verifying reasonableness of figures of individual items of capex/ opex), the exercise of revisiting either the decisions of the MC or the wisdom of the decisions of the operator in areas where commercial or technical decisions or details were left to the judgement of the operator was incompatible with the terms of the PSC.
- An exercise, whereby the auditor would step into the shoes of the operator and attempt to evaluate whether the decisions by the operator – taken within his authorized area of operation – were in accord with some undefined norms or the processes adhered to by bureaucratized decision making processes and that too without having the advantage of access to technical expertise or having the accountability for implementing such projects, was clearly beyond the provisions of the PSC.
- The gold standard prescribed in the PSC was Good International Petroleum Industry Practice (GIPIP), and a reference to GIPIP was conspicuous by its absence in the audit report.

We do not agree with the operator’s views regarding our audit scope, extent and coverage.

- ***One of our key audit objectives was to verify whether the revenue interests of the Government (including royalty and Gol share of profit petroleum) were properly protected, and for this purpose, verify whether the figures of individual items of capex/ opex were reasonable (and also commensurate with original/revised budgets, plans, feasibility reports or other similar documents); and also whether there was collateral evidence which would provide assurance regarding the authenticity of goods and services procured and provided. In our opinion, this is entirely consistent with Article 25 of the PSC, and Section 1.9 of the Accounting Procedure to the PSC.***
- ***“Verification of charges and credits relating to the contractor’s activities and other documents considered necessary to audit and verify the charges and credits” is not merely limited to an arithmetical totaling of charges and credits and tracing of***

charges/ expenses from the accounting statements to the contracts/ expense vouchers. Such an exercise would extend to verifying whether the costs being depicted in the PSC accounts by the contractor, which would critically affect the determination of profit petroleum and Gol's share therein, are correctly determined, and in particular, costs incurred for procurement of goods and services are determined through a competitive process, so as to minimize costs (and ultimately maximize the Gol share of profit petroleum). Such verification does NOT amount to the auditor stepping into the shoes of the operator and evaluating such decisions in accordance with "bureaucratized decision making processes".

- Our objective remains restricted to verifying whether Gol's revenue interests (including impact on current/ future Gol share of profit petroleum) are properly protected. As stated earlier, we have not conducted a performance audit of the activities of the operators.*
- Audit also wishes to firmly emphasise that all our enquiries and findings emerge from and are limited to the PSC. We do not profess to go into any procedure or policy related aspects leading to the conclusion of the PSC. Taking the PSC as given, we have merely examined the contractual obligations of the signatories to the contract, viz., the Govt and the private contractors. Our findings are totally guided by the "written word" of the contract.*
- As regards the "gold standard" of GIPIP, we have already pointed out that there is no such codified document or set of standards brought out by any international body or organization in the petroleum industry. Rather than being a clear, unambiguous, and self-evident "gold standard", GIPIP merely represents "reasonable judgement" exercised by operators. While not questioning the exercising of professional judgement by the operators, we have been mandated by the Gol to scrutinize expenses, and the underlying procurement and related decisions, which impact Gol's take in terms of profit petroleum.*
- The challenge of the Operator with regard to the expertise of the institution of the CAG in conducting audit of oil and gas Exploration & Production (E&P) is unwarranted. This institution has been conducting audit of India's largest E&P Company, ONGC Ltd. as well as Oil India Ltd. for several decades. The collective audit expertise of our institution is adequate to meet the challenges of scrutiny of hydrocarbon PSCs.*

In its response, MoPNG (July 2011) has agreed that the scope of audit conducted by the CAG is within the common audit parameters, and indicated that financial/accounting audit also envisages review of activities and resources contributing to financial events and the controls thereon.

3.9 Structure of Audit Report

The findings in the Performance Audit Report are divided into the following parts:

- Chapters 4 to 6 relate to audit findings relating to four blocks - KG-DWN-98/3, RJ-ON-90/1, and Panna-Mukta/ Tapti.

The findings in Chapters 4, 5, and 6 relating to the KG-DWN-98/3, RJ-ON-90/1 and Panna-Mukta-Tapti blocks/ fields include both findings based on audit of the records of MoPNG/ DGH and those audit findings arising out of the scrutiny of the records of the operators of these blocks/ fields.

- Chapter 7 relates to general audit findings (in respect of the other blocks/ fields) relating to compliance with the terms of the Production Sharing Contracts, and the adequacy and effectiveness of monitoring and control by MoPNG and DGH thereto;
- Chapter 8 relates to conclusions and general recommendations.