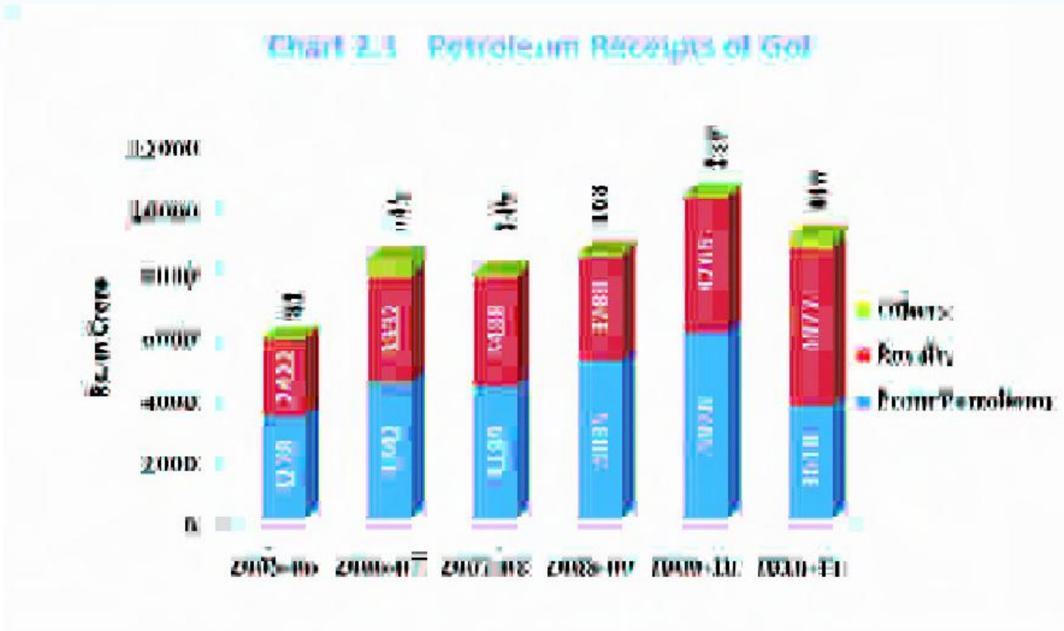
Chapter 2 - Fiscal and Contracting Regime for Hydrocarbon Production Sharing Contracts

2.1 Non-Tax Receipts of GoI

Details of Non-Tax Receipts under the Major Head 0802- Petroleum during the last six years are shown below:



Source: Finance Accounts for data from 2005-06 to 2009-10, and PAO, MoPNG for 2010-11 data.

2.2 Cost Petroleum and Profit Petroleum under PSCs

The key feature of the PSC is that the contractors bid on the percentage of the reward that the GoI receives from the hydrocarbon block. The contractor undertakes the initial exploration risks. If no hydrocarbons are discovered, or the quantities are small, the revenues generated may not be sufficient to recover the costs incurred; this risk is borne by the contractor.

The three key issues under the NELP fiscal regime are Cost Recovery, Profit Petroleum, and Investment Multiple; these are described below:

Cost Recovery	The contractor bids the Cost Recovery Factor – i.e. the percentage of revenues which he is entitled to take in a year to recover his exploration, development and production costs. This percentage can be up to 100 per cent. The higher the cost recovery factor that the contractor bids, the earlier the costs can be recovered; however, in such a situation, his fiscal package will be relatively unattractive as part of the bid evaluation.

	The amount of costs recoverable from annual revenues is termed as **Cost Petroleum**
Profit Petroleum	After deducting the recoverable costs (Cost Petroleum) from the revenues, the resulting **Profit Petroleum** is then divided between the Government and the Contractor. The sharing of profit petroleum, which is linked to the pre-tax Investment Multiple (IM) of the previous year, is a biddable parameter, and is evaluated as part of the fiscal package.
Investment Multiple	The pre-tax Investment Multiple (IM) is the ratio of cumulative Net Cash Income[9] to the cumulative exploration and development costs. The lower the IM, the more capital-intensive the project. As part of their bid, the contractors are required to specify the GoI share at different IM slabs e.g. less than 1.5, 1.5 to less than 2.0 etc. Generally, the contractors bid for a lower GoI share for the lower IM slabs, and the highest GoI share for IM of 3.5 and above (i.e. where net cash income is highest compared to the capital expenditure). Also, since capital expenditure in the initial years will generally be high and will decrease over time, the IM is expected to increase over time from year to year.

It may be noted that instead of the pre-tax IM (under NELP), the earlier fiscal regimes in respect of discovered fields or pre-NELP exploratory fields involved post-tax IM or Post Tax Rate of Return (PTRR).

2.3 Other receipts

Royalty/ Dead Rent	Royalty is payable by the contractor/ licensee[10] either at a fixed rate (in respect of oil produced from discovered fields/ pre-NELP exploratory blocks) or as a percentage of the "wellhead" value of oil/ gas produced. For offshore blocks, royalty accrues to GoI, while for onshore blocks, royalty accrues to the State Governments. Where no royalty is leviable (usually when there is no oil/ gas production), dead rent is payable on the area covered by the mining lease
Cess	Under the Oil Industry (Development) Act, 1974, cess is leviable on indigenous crude oil. The cess on crude oil produced from fields under PSCs prior to NELP is limited to Rs. 900/ tonne. PSCs under NELP do not

[9] Net Cash Income = Cost Petroleum + Contractor's Share of Profit Petroleum (based on last year's IM) + Incidental Income – Production Costs – Royalty

[10] The entity which holds the Mining Lease under the PNG Rules, 1959

	have any provision for levy of cess.
Petroleum Exploration License (PEL)	For undertaking exploration activities, the Contractor has to obtain a Petroleum Exploration License (PEL) under the provisions of the Petroleum and Natural Gas Rules, 1959: • From the Central Government in respect of offshore blocks; and • From the concerned State Government in respect of onland blocks (with the previous approval of the Central Government). The PEL fee, which is levied during the exploration period, consists of a security deposit of Rs. 4,00,000, an initial fee of Rs. 1,00,000, and a yearly advance license fee increasing from Rs. 200 to Rs. 4000 per sq. km per year within 5 years.
Mining Lease (ML)[11]	For extraction of petroleum, the contractor has to obtain a Mining Lease under the PNG Rules from the Central / State Government. The Mining Lease fee consists of a security deposit of Rs. 8,00,000, an initial fee of Rs. 2,00,000, and dead Rent or royalty (whichever is higher).

2.4 Comparison of fiscal regimes

A comparison of the fiscal regimes under discovered fields (e.g. Panna-Mukta and Tapti); pre-NELP exploratory blocks (e.g. RJ-ON-90/1); and NELP (e.g. KG-D6) on key issues is summarised below:

Table 2.1 – Comparison of Fiscal Regimes for discovered fields, pre-NELP exploratory blocks, and NELP blocks

	Discovered fields	Pre-NELP exploratory blocks	NELP blocks
Basis of sharing of profit petroleum	Post-tax Investment Multiple (IM) or Post Tax Rate of Return (PTRR)		Biddable pre-tax Investment Multiple (IM)
Recovery of cost petroleum	100 per cent cost recovery		Biddable Cost Recovery Factor (CRF) of upto 100 per cent
Liability for payment of royalty/ cess	All constituents of PSCs according	100 per cent liability on NOCs (irrespective of	All constituent of PSCs according to their Participating Interest

[11] Also referred to as PML (Petroleum Mining Lease)

	Discovered fields	Pre-NELP exploratory blocks	NELP blocks
	to their Participating Interest	their participating interest)	
Rates of Royalty	Rs.481/MT for crude oil; @ 10 per cent of wellhead value of gas		10 per cent of wellhead value of gas; For crude oil – 12.5 per cent for onland areas, and 10 per cent for offshore areas; For deepwater areas, royalty is 50 per cent of applicable rates for first seven years of commercial production
Rates of Cess	Rs. 900/ MT for crude oil		No cess leviable
Tax structure	Rate of corporate income tax leviable as per the provisions of the Income Tax Act for Indian companies.		There is an income tax holiday in respect of deepwater block for the first 7 years[12]; however, Minimum Alternative Tax (MAT) is applicable. 100 per cent deduction allowable for all expenditure in respect of exploration and drilling operations. Also, unsuccessful exploration costs in respect of other contracts can also be deducted 100 per cent.
Custom duty	All equipment imported for petroleum operations exempt from customs duty on the basis of Essentiality Certificate (EC) issued by DGH		
Marketing of oil/gas	First right of GoI on purchase of 100 per cent oil and gas		Freedom to market the crude oil/gas discovered in domestic

[12] Ministry of Finance subsequently clarified that the seven year holiday is only for oil production (and not gas production)

	Discovered fields	Pre-NELP exploratory blocks	NELP blocks
	production		market.
Carried interest of NOCs (without payment by NOC)	Nil	30 per cent exercisable on commercial discovery	Nil
Participating interest by NOCs	40 per cent in case of medium sized field and Nil in case of small sized fields.	Up to 40 per cent	NOCs to compete for acreage on "level-playing field"; no Participating Interest reserved for NOCs

2.5 Production Sharing Contracts (PSCs)

The Production Sharing Contracts (PSCs) between the Government of India and the contractor(s) for specific fields/ blocks provide the contractual basis for petroleum operations, cost recovery, profit sharing and other aspects. In most PSCs, there are many contracting parties with varying shares of Participating Interest (PI); one party (usually the party with the majority PI) is designated as the **"operator"**. The constituents of the contractor have to enter into an "Operating Agreement"[13] for conduct of petroleum operations. This agreement should provide for, among other things:

- The appointment, resignation, removal and responsibilities of the operator;
- The establishment of an "Operating Committee" (OC)[14] comprising of an agreed number of representatives of the Companies chaired by a representative of the operator;
- Functions of the Operating Committee (taking into account the PSC provisions), procedures for decision making, frequency and place of meetings; and
- Contribution to costs, default, sole risk, disposal of petroleum, and assignments between the parties to the Operating Agreement.

The content of these PSCs vary substantially between those for discovered fields, pre-NELP exploratory blocks and NELP blocks, and even within different NELP rounds (with Model

[13] Termed as "Joint Operating Agreement" in the Panna-Mukta and Tapti PSCs

[14] Termed as "Operator Board" (OB) in the Panna-Mukta and Tapti PSCs.

Production Sharing Contracts (MPSCs) being drawn up for each NELP round). The main features of the NELP PSCs are summarized below:

Table 2.2 – Main Features of NELP PSCs

Aspect	PSC Provisions
Exploration Period and Phases	• The Exploration Period consists of three Exploration Phases for a total of maximum 7 years; in the case of deepwater areas and frontier areas, the time frame is extended to 8 years (the first phase may be up to 4 years). • In each of the exploration phases, the contractor has to commit in his bid the Mandatory/ Minimum Work Programme (MWP) that he will undertake during that phase in terms of initial surveys (gravity and geochemical surveys etc.), seismic programme, and exploration wells (including depth objective). • If the MWP is not completed, the contractor will have to carry out additional, substitute or alternate work programme (to match the bid commitment) or pay the equivalent cost to Government. If the MWP is not completed, the contractor cannot proceed to the next phase. • After the 1st Exploration phase, the contractor can retain upto 75 per cent of the contract area (including development and discovery areas), while after the 2nd Exploration phase, he can retain up to 50 per cent[15] of the contract area, and after the 3rd Exploration phase, he can retain only the Discovery and Development Areas.
Discovery and Development	• Once a discovery of hydrocarbons is made, the Contractor should inform the Government and Management Committee, run tests to determine whether the discovery is of potential commercial interest (meriting appraisal) and inform the Management Committee within 60 days. • If the discovery is of potential commercial interest, the contractor should submit, within 120 days[16], a proposed Appraisal Programme (with a Work Programme and Budget) to determine whether the Discovery is a Commercial Discovery, and also delineate the

[15] If the development and discovery areas exceed the stipulated 75/ 50 per cent, the contractor can retain areas to that extent.

[16] One year in the case of a Non-Associated Natural Gas (NANG) find.

Aspect	PSC Provisions
	Development Area. • Within 30 months[17] of a discovery of crude oil, the Contractor should notify the Management Committee whether it should be treated as a Commercial Discovery or not. • Within 200 days[18] of declaration of a commercial discovery, the contractor should submit a comprehensive development plan, which should characterize the reservoir, indicate estimates of reserve in place, possible production magnitude and sustained production rate, outline the production facilities to be installed, and wells to be drilled, and estimate the development and production costs. • On submission of the development plan, the contractor should also submit an application for a Petroleum Mining Lease for the proposed Development Area. The lease shall be for 20 years with an extension of 5 years (10 years in the case of natural gas)
Natural Gas (Special Provisions)	• For Associated Natural Gas (ANG) in excess of requirements, if the contractor does not choose to exploit it, the Government can take it free of charge • In respect of Non Associated Natural Gas (NANG), on the Contractor's submission of a proposal for Commercial Discovery, the MC shall consider the contractor's proposal: ❖ With reference to commercial utilization or commercial development of NANG in the domestic market; and ❖ In the context of Government's policy on gas utilization, and the chain of activities required to bring NANG to potential consumers • Valuation of Natural Gas would be on the basis of competitive arm's length sales in the region for similar sales under similar conditions. The formula or basis on which prices shall be determined shall be approved by the Government, which will take into account the prevailing policy, if any, on pricing of Natural Gas, including any linkages with traded liquid fuels.
Good International	The PSC defines GIPIP inter alia as *"those practices, methods, standards, and procedures generally accepted and followed internationally by*

[17] 3 years in case of a NANG find.

[18] 1 year for a NANG find.

Aspect	PSC Provisions
Petroleum Industry Practices (GIPIP)	*prudent, diligent, skilled and experienced operators in Petroleum Exploration, Development and Production Operations and which, at a particular time in question, in the exercise of reasonable judgement and in light of facts then known at the time a decision was made, would be expected to accomplish the desired results and goals established in respect of which the practices, methods, standards, procedures and safety regulations, as the case may be, were followed; provided, however, that "Good International Petroleum Industry Practices" is not intended to be limited to the optimum practices or methods to the exclusion of all others, but rather to be a spectrum of reasonable and prudent practices, methods, standards, procedures and safety regulations. In the event that a question is raised by a party as to what constitutes GIPIP in a particular circumstance, it shall be agreed to by the Management Committee and failing which the same shall be decided by the Government with input from DGH or inputs from amongst a list of organisations or persons, as decided by the Government based on recommendations of DGH and its decision shall be binding provided, however, that in case a party has earlier approved or agreed to a plan, activity, practice, procedure etc. under this Contract, then it shall not raise a question about GIPIP on that matter".*
	However, GIPIP is not a document, set of documents or standards, and has not been codified by any internationally recognised organization/ body in the petroleum industries. Enquiries made by us with MoPNG/ DGH did not indicate the existence of any such codified set of GIPIP standards. ***The definition of GIPIP in the NELP PSC itself indicates that what constitutes Good International Petroleum Industry Practices in a particular circumstance is subject to agreement by the MC, failing which decision by GoI with inputs/ recommendations from DGH. Clearly, GIPIP is not a clear, unambiguous, and self-evident "gold standard", but "reasonable judgement" exercised by operators.***
Management Committee	The Management Committee (MC) for each PSC shall have two representatives from the GoI and one each from the companies constituting the contractor[19]; the GoI representative shall be the Chairman. If decisions are not unanimous, decisions need majority

[19] If the contractor constitutes only one company, it shall have two members on the MC

Aspect	PSC Provisions
	Participating Interest (70 per cent or more) with Government representatives' positive vote. The MC has two sets of functions – review/ advisory and approval. **Review/ Advisory functions:** ❖ Annual Work Programmes and Budgets for Exploration Operations ❖ Proposals for surrender/ relinquishment ❖ Proposals for appraisal programme ❖ Declaration of discovery/ commercial discovery ❖ Actual depth objective for each exploration well **Approval functions:** ❖ Annual Work Programmes and Budgets for Development and Production Operations ❖ Proposed Development Plans; Determination of Development Area ❖ Yearly Programme Quantity ❖ Extension of Exploration Phase ❖ Abandonment of Exploration Drilling on account of geological conditions encountered
GoI's Role	• Extension of Exploration Period for Appraisal Programme by 30 months[20] • Approval of Development Plans, after rejection by the MC • Approval of assignment or transfer of participating interest by a contractor
Accounts and Audit	• Annual audit of accounts shall be carried out by an independent CA firm. The appointment of the auditor and the scope of audit need prior approval of MC. • Further, the GoI shall have the right to audit the accounting records of the contractor, within 2 years from the end of the financial year: ❖ This audit may be undertaken either through its own representatives or through a qualified firm of CAs or a reputed

[20] 3 years in the case of NANG discovery

Aspect	PSC Provisions
	consulting firm. ❖ Any audit exception should be notified to the Contractor in writing within 120 days, to which the Contractor shall respond within 120 days. ❖ Agreed adjustments resulting from an audit shall be made to the Government take within 30 days. For amounts claimed but not accepted by the contractor, the amount shall be deposited in an escrow account[21], pending decision of the sole expert/ arbitral tribunal.

The Production Sharing Contracts provide elaborate and detailed mechanisms/ procedures for protecting the interests of the GoI. Such procedures/ mechanisms would not be necessary if the Government's share was in the nature of royalty, linked only to the quantity and/or value of gas and oil produced. In such a situation, Government's concerns would be limited to obtaining assurance as to the quantity of oil and gas produced and proper valuation thereof. However, a profit-sharing mechanism inevitably requires detailed controls and procedures to ensure that the Government's financial interests are properly protected.

[21] The provision relating to depositing the money in an escrow account came into effect from NELP-IV onwards.